U.S. Fish and Wildlife Service
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

California Department of
Fish and Game
Post Office Box 47
Yountville, California 94599

In reply refer to:
1-1-07-TA-1158

June 26, 2007

Mr. Darryl Boyd
Department of Planning, Building and Code Enforcement
City of San Jose
200 East Santa Clara Street, 3rd Floor
San Jose, California 95113

Subject: Draft Environmental Document on the Coyote Valley Specific Plan in the City of San Jose, Santa Clara County, California

Dear Mr. Boyd:

This letter responds to the March 2007 Draft Environmental Impact Report (DEIR) for the Coyote Valley Specific Plan (CVSP) in Santa Clara County, California. The proposed project is located within the Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) Planning Area. The comments by the U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (CDFG) are provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (FESA); the Service's Mitigation Policy of 1956; the California Endangered Species Act (California Fish and Game Code §§ 2050-2097) (CESA); and the California Environmental Quality Act (California Public Resources Code § 15000 *et seq.*) (CEQA). Our comments and recommendations are provided to assist you with your environmental review of the project and are not intended to preclude future comments from the Service and CDFG.

CDFG and the Service's combined comments and recommendations are based on 1) the *Draft Environmental Impact Report, Coyote Valley Specific Plan* (DEIR) including Appendices, dated March 2007; 2) the *Santa Clara Valley Habitat Conservation Plan and Natural Community Conservation Draft Chapters 1, 2, 3, and Appendices A, D, and F*, dated August 2006; 3) field data gathered over the last nine months by CDFG and students from San Jose State University and De Anza College and 4) other information available to us. CDFG and the Service informed the City of our preliminary concerns regarding the CVSP in a letter dated January 3, 2007 (Service and CDFG 2007). That letter is hereby incorporated by reference.

CDFG and the Service have significant concerns relative to the proposed project, the analysis presented in the DEIR, the impacts identified (and those left unaddressed) and the mitigation

measures proposed to compensate for adverse effects. In addition, we believe the proposed project is likely to conflict with reasonably foreseeable conservation strategies currently under development for the HCP/NCCP. The DEIR is inadequate, and should be revised, due to factual errors, omission of impacts, inadequate analysis of impacts, faulty assumptions and conclusions, inappropriate or missing mitigation, inadequate scientific data, inappropriate substitution of pre-determined environmental standards in lieu of project specific analysis, inappropriate deferral of actions (i.e. collection of data, completion of project description) and a partial failure to use stated thresholds of significance. The DEIR also fails to demonstrate substantial evidence for some conclusions and to use stated thresholds of significance consistently and appropriately.

Below, we also discuss our concerns regarding the proposed project's consistency with the developing HCP/NCCP. We acknowledge that consistency with the HCP/NCCP is not a direct CEQA issue. However, the CVSP is considered an interim project under the HCP/NCCP Planning Agreement (County of Santa Clara *et al.* 2005). The Planning Agreement states that "the Parties agree that potential conflicts with the preliminary conservation objectives shall be identified during the Interim Process to help achieve the preliminary conservation objectives, not preclude important conservation planning options or connectivity between areas of high habitat values, and help guide and ensure development of a successful [HCP/NCCP] that incorporates these interim projects" (County of Santa Clara *et al.* 2005).

The format of our comment letter is different from that used in the DEIR. Although our comments follow the general order of the topics presented in the DEIR, our comments are organized first with a discussion of the existing condition of a particular resource, followed by a discussion of the impact(s) to that resource, followed by a discussion of mitigation for the impacts to that resource. The DEIR is currently structured as follows: existing conditions of resources A-Z, impact to resources A-Z, and mitigation and avoidance measures for resources A-Z. The format used in the DEIR requires the reader to continuously back reference conclusions, mitigation and avoidance measures to impacts and the baseline condition because these issues are not discussed in tandem for each resource. We believe that the analysis for a project with the magnitude of CVSP would be greatly facilitated if the DEIR were re-organized to discuss impact, mitigation, and conclusions for each resource in tandem (i.e. impact[s] to resource A, mitigation for impact[s] to resource A, and conclusion[s] for impacts to resource A; impact[s] to resource B, mitigation for impact[s] to resource B, and conclusion[s] for impacts to resource B). In addition, information in the appendices should be limited to highly technical data. The main text of the DEIR should, however, contain all information necessary for the reader to analyze impacts and mitigation.

Section 1.0 Introduction, Background, and Project Objectives & Section 2.0 Description of the Project

The CVSP DEIR describes proposed development on approximately 7,000 acres between the cities of San Jose and Morgan Hill. The majority of this development would be in the northerly 3,400 acres of the valley. Key components of the project include

approximately 26,000 dwelling units, approximately 1.6 million square feet of commercial space and approximately 15,000,000 square feet of industrial space (City 2007). Ancillary projects include:

- Public transit, including Caltrain, Valley Transportation Authority (VTA) bus system and an internal Bus Rapid Transit system;
- An extensive network of trails for pedestrians, equestrians and bicyclists;
- Construction of a new road interchange (Coyote Parkway), improvements to interchanges at Bailey Avenue and Coyote Creek Golf Drive, construction of a new four lane roadway adjacent to Monterey Road, widening Santa Teresa Boulevard to four lanes, extension of Bailey Avenue over the Santa Teresa Hills to McKean Road and the southern terminus of Almaden Expressway, and addition of internal road networks;
- Two high schools, two middle schools, nine elementary schools on 171 acres;
- A potential site for a Junior College (55 acres);
- Approximately 245 acres of parks, playing fields and sports fields;
- Two fire stations, a community center and library;
- Flood control and drainage facilities consisting of the relocation, widening and enhancement of Fisher Creek, a central artificial lake occupying approximately 50 acres (approximately 1,400 acre feet in capacity), an urban canal joining the lake to the relocated Fisher Creek, two storage basins occupying Laguna Seca at the north end of the valley (approximately 1,700 acre-feet in capacity) and a storm drain system.

The CVSP divides Coyote Valley into three areas: the North Coyote Campus Industrial Area, the Urban Reserve and the "Greenbelt." The "Development Area" is further described as the North Coyote Campus Industrial Area and Urban Reserve portions of the valley. Page 14 of the DEIR states that "the Greenbelt is not proposed for urban development or annexation to the City of San Jose. It is included in the planning process to ensure its preservation as a permanent non-urban buffer between the cities of San Jose and Morgan Hill" (City 2007). This statement does not appear to be entirely consistent with the following description of the "Greenbelt" on page 44 of the DEIR:

The Coyote Valley Greenbelt, as shown on Figures 1.0-3 and 1.0-4 (between Palm Avenue and Morgan Hill and on the east side of Coyote Creek, extending to Highway 101 between Metcalf Road in the north and Morgan Hill), will remain as a permanent non-urban buffer between San José and Morgan Hill.

> *The Greenbelt Strategy would establish a framework to create and sustain a rural environment that supports rural residential home sites, active open space and related recreation, conservation and various forms of small scale agriculture. It would involve the creation of a non-profit organization or quasi-public entity to facilitate and coordinate small scale agriculture, and conserve open space and environmental resources, and to provide operation and funding. They would work with existing property owners and potential small scale farmers, and recreational and open space entities to provide on-going funding, and coordinate mitigation for North and Mid-Coyote development.*

> *The implementation of a Greenbelt Strategy would be done in accordance with existing City, County, and City of Morgan Hill General Plan land use policies and zoning regulations. The strategy would include the protection of riparian corridors, and the planning of trails and other recreational facilities, including ballfields. Other uses within the Greenbelt could include agricultural, open space, groundwater recharge, and wetland and habitat mitigation areas. Residential uses would include those currently allowed by the County of Santa Clara's general plan and zoning ordinance. The Strategy would include design guidelines, landscaping standards, roadway design, and other elements that enhance the quality of the rural non-urban landscape* (City 2007).

We recommend the DEIR be revised to clearly identify the primary function of the "Greenbelt." As demonstrated above, the DEIR describes proposed activities in the "Greenbelt" that are not consistent with plant and wildlife conservation and brings into question any certainty regarding the long-term viability of the "Greenbelt" for plant and wildlife conservation. Section 2.1.12 should be revised to identify how mitigation and wildlife management will be integrated with a "Greenbelt" Strategy that "would establish a framework to create and sustain a rural environment that supports rural residential home sites, active open space and related recreation, conservation and various forms of small scale agriculture" (City 2007). Given the information provided, it is unclear how the "Greenbelt" Strategy would "coordinate mitigation for North and Mid-Coyote Development" given that its primary function does not appear to be plant and wildlife preservation and management. Furthermore, please quantify the currently developed acreage of the "Greenbelt." According to Figure 1.0-3, the majority of existing development seems to be located in the "Greenbelt." If the "Greenbelt's" primary function will not be the preservation and management of biological resources, the area should be renamed to accurately reflect its true function.

In addition to our concerns regarding the "Greenbelt," we are also concerned about the reference on page 34 of the DEIR to the proposal for lighted playing fields in Laguna Seca. These fields are also depicted on at least one figure (Figure 2.0-2). It is our understanding that these fields have been removed from the proposed project; if this is accurate, please remove all references to lighted ball fields in Laguna Seca from the recirculated DEIR. If the ball fields remain a part of the proposed project, the DEIR should discuss the consistency of this land use with the other uses (i.e. flood storage, wetlands restoration, etc.) proposed for the site.

Section 3.0 Consistency With Adopted Plans

Please note that Table 3.0-1 contains an inconsistency regarding Species of Concern Policy (page 51). The table indicates the project is inconsistent with the policy. Section 3.1.3.19 (page 76) however, states that the project is consistent with the policy because the project includes mitigation measures to provide replacement habitat. The inconsistency should be corrected in the chart or text.

3.9 Santa Clara County Coyote Creek Parkway Master Plan

The CVSP appears to be inconsistent with the following statement in Guideline #1 of the County's integrated parkway plan: "Functioning habitat corridors that connect the

Parkway with the surrounding hills and open spaces should be identified, established, and maintained" (City 2007). The proposed CVSP includes the development of approximately 3,400 acres, largely consisting of open space (i.e. agricultural fields, wetlands, grasslands, and woodlands). In addition, the discussion of existing corridors in the DEIR lacks robust data (i.e. tracking plates, surveys, camera surveillance, etc.) to ensure that all functioning corridors were identified. See more detailed discussion regarding wildlife corridor issues below.

3.10 Santa Clara Valley HCP/NCCP

In addressing the consistency of the CVSP with the HCP/NCCP Planning Agreement, page 90 of the DEIR states the following:

> ***Consistency:*** *The CVSP is specifically identified as an "Interim Project" in the Planning Agreement. As an Interim Project, the CVSP is allowed to proceed independently through the federal and state regulatory permit processes in advance of the HCP/NCCP planning process. CVSP remains subject to the FESA/NEPA and CESA/CEQA and other applicable environmental regulations. The Planning Agreement states that CVSP shall adequately compensate for all direct and indirect effects from the action, and will not preclude the development of a viable conservation strategy for the HCP/NCCP. The CVSP includes mitigation measures for its direct and indirect impacts. For these reasons, the CVSP project is consistent with the Santa Clara County HCP/NCCP* (City 2007).

Section 4.12.8 of the DEIR expands on this and says:

> *The proposed CVSP project is considered an "Interim Project" in this effort that would be processed to ensure coordination regarding development to help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. The Planning Agreement states that CVSP shall adequately compensate for all direct and indirect effects of the action, and will not preclude the development of a viable conservation strategy for the HCP/NCCP. Therefore, the CVSP project would be consistent with the Santa Clara County HCP/NCCP (City 2007).*

Please note that there appears to be at least one sentence missing here since the concluding sentence does not follow from the one preceding it. Since that text is necessary to support the conclusion, we recommend that the missing text be inserted. That text should clearly explain how the CVSP will not preclude the development of a viable conservation strategy by the HCP/NCCP.

CDFG and the Service disagree with the City's conclusion regarding the proposed project's consistency with the developing HCP/NCCP. By letter dated January 3, 2007, CDFG and the Service notified the City of our concerns regarding the preliminary layout of the CVSP and identified potential conflicts with the developing HCP/NCCP conservation strategy relative to 1) riparian buffers, 2) habitat connectivity, 3) nitrogen deposition and 4) plant and wildlife species.

After receiving our preliminary comments, the City indicated that the DEIR would address our concerns. However, the DEIR does not contain any supporting arguments or evidence or meaningful discussion addressing our preliminary comments. The first time

the issue is discussed, in Section 3.1, the text concludes that since the project mitigates its impacts, it is consistent with the HCP/NCCP. This statement represents a fundamental misunderstanding of the HCP/NCCP and the commitments the City agreed to when it signed the Planning Agreement. The development of mitigation measures developed to satisfy the requirements of CEQA and the implementation of existing City policies (i.e. a 100 foot riparian buffer) do not necessarily satisfy the commitments that the City agreed to in the Planning Agreement. Section 4.6.4 of the DEIR, Mitigation and Avoidance Measures for Impacts to Biological Resources, does not address the standards in the Planning Agreement. The discussion in Section 4.12.8, therefore, cannot be evaluated since it is incomplete.

The NCCP portion of the HCP/NCCP sets a higher conservation standard than that set by CEQA since the NCCP Act requires species and habitats be conserved and restored, rather than simply maintain the existing baseline condition. The CVSP, as presented in the DEIR, makes no progress toward that goal and, as stated in our January 2007 letter, actually precludes conservation benefit and potential conservation alternatives for the HCP/NCCP since it adversely affects riparian corridors along Coyote Creek, adversely affects serpentine habitats through both direct and indirect impacts, and effectively severs critical movement across Coyote Valley.

While attempts have been made in the DEIR to speak to these issues, the data used, analysis generated, and conclusions reached are inadequate or poorly justified and will be discussed in turn below. The shortcomings of the DEIR may, in part, be due to a lack of resources to do a complete analysis. Due to its size and location, the CVSP is significant in its relationship to the HCP/NCCP, in that an adequate, data-based analysis is essential to ensure consistency with the HCP/NCCP and to fulfill the City's commitment in the HCP/NCCP process. The project description, effects analysis and mitigation and avoidance measures in the CVSP should be revised so as not to preclude conservation planning options and connectivity related to Coyote Creek riparian corridors, serpentine habitat and species conservation and movement across Coyote Valley.

Section 4.0 Environmental Setting, Impacts, & Mitigation

CEQA requires that an EIR include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant (CEQA Guidelines, Section 15125(a)). As such, we recommend that the appropriate maps (i.e. Figure 4.6-1 and Figure 4.6-18) be revised to include habitat types both within, and adjacent to, the project area. As identified by the Independent Science Advisors for the HCP/NCCP, adjacent habitat must be considered to conduct a meaningful biological analysis (Spencer *et. al.* 2006).

Knowledge of the regional setting is critical to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to

that region and would be affected by the project. The DEIR must demonstrate that the significant environmental impacts of the proposed project were adequately investigated and discussed and it must permit the significant effects of the project to be considered in the full environmental context (CEQA Guidelines 15125(c)).

Furthermore, a CEQA analysis and the data supporting it should meet the "substantial evidence" standard. "Substantial Evidence" includes fact, a reasonable assumption predicated on fact or expert opinion supported by fact. This means that there is enough relevant information and reasonable inferences from that information that a fair argument can be made to support a conclusion, even though alternative conclusions might also be reached. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment does not constitute substantial evidence (CEQA Guidelines Section 15384(a)).

According to page 91 of the DEIR, the City's environmental consultants were granted access to 2,185 acres of the total 3,800 acre CVSP Development Area (57.5%) and that "drive-by or windshield surveys" were conducted for inaccessible areas (City 2007). The DEIR does not describe what surveys, if any, were conducted within the "Greenbelt." Based on the information provided in the DEIR, we do not at this time believe that the DEIR meets CEQA's "substantial evidence" standard since approximately 42.5 % of the proposed development area was inaccessible to the City's environmental consultants. Drive-by and windshield surveys also do not provide a robust biological analysis that will rise to the substantial evidence standard of CEQA since they do not provide facts, reasonable inferences predicated on fact or expert opinion supported by fact, relative to the potential biological resources and the reliance of those resources on the approximately 1,615 acres of the north valley area. Furthermore, windshield surveys and aerial photograph interpretation provide little useful information relative to specific plant species. Many special status plants are small and occur in discrete patches so their presence often cannot be adequately assessed without targeted surveys conducted during species-specific blooming periods.

Furthermore, the DEIR does not provide a map identifying portions of the project area that were (and were not) accessible for field surveys. The City agreed to forward a map with this information to CDFG and the Service, upon our request during a teleconference with the City on April 19, 2007. We have not received the map to date. The revised DEIR should include this map. Species occurrence data points contained in Figure 4.6-2 (special status plant occurrence) and Figure 4.6-3 (special status wildlife occurrence) are. for the most part, located outside of the project boundary. It is unclear if the lack of occurrence data points within the project area is a function of the absence species or a function of lack of surveys. The DEIR should clearly identify data gaps. If the City believes that the data it collected is adequate for the purposes of CEQA, the DEIR should be revised to include a detailed discussion of how the limited field work accomplished satisfies CEQA's substantial evidence standard and justify why the environmental setting is adequate to complete an acceptable CEQA analysis. Otherwise, the revised DEIR should be supplemented with additional field data.

Furthermore, mitigation measures that depend on future biological surveys are not only inappropriate but are inadequate for the purposes of CEQA. Under CEQA, reliance on additional biological surveys during future phases of a project are sometimes appropriate when enough biological data is available to account for potential future impacts in a coherent, scientific mitigation program that has gone through the CEQA process. However, deferred data collection as proposed for the CVSP, is inappropriate because it could significantly limit mitigation options since project decisions would be not be informed by site-specific scientific data. While we acknowledge that the City is in a difficult position because of its inability to access a substantial amount of its project area, this cannot be a consideration in the adequacy of the CEQA analysis. If additional access cannot be obtained, the only options appear to be project withdrawal or development of specific guidelines to assess habitat use and potential for occurrence for each of special status species. The latter option can be quite complex and should be done in coordination with the appropriate Resource Agencies (i.e. CDFG, Service, NOAA Fisheries, U.S. Environmental Protection Agency (EPA), Regional Water Quality Control Board, and/or U.S. Army Corps of Engineers Regulatory Branch) and other groups and individuals with relevant expertise.

4.6 Biological Resources

CDFG and the Service acknowledge and agree with the following statements in Section 4.6.1 (page 238) of the DEIR:

Due to the importance of California's native ecological systems from a biological, heritage, and economic standpoint, impacts on such resources – especially those that are rare or those with high ecological values - are considered an adverse environmental impact under CEQA.

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts, and the natural communities or habitats that support them, are of particular concern. Other sensitive, natural communities (such as wetlands, riparian woodlands, and oak woodland) that are critical to wildlife or ecosystem function are also key biological resources. It must be acknowledged that "special status" species lists are likely to change with additions and deletions over the approximately 40-year build-out period projected for the CVSP.

We would add to these statements that geographic areas in and of themselves (as well as communities) that provide connectivity meet these definitions, as they have high ecological value, are becoming much rarer and are absolutely critical for wildlife and ecosystem function.

In general, one of the flaws we observed throughout the DEIR, as evidenced in Section 4.6.2.1, is the City's failure to provide data to support its conclusions regarding the significance of impacts. Section 15382 of the CEQA Guidelines define a significant impact as:

> *"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.*

Regarding the determination of whether or not a particular impact is significant, Section 15064(b) of the CEQA Guidelines states:

> *The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.*

The intent then is to evaluate a given situation and make a determination as to whether the change(s) expected to occur as a result of project implementation will rise to the level of significance under CEQA. The standards listed in Section 4.6.3.1 (based on Appendix G of the CEQA Guidelines), combined with other techniques such as adopted thresholds of significance and consultation with responsible agencies are appropriate considerations in making significance determinations. While it can be very challenging to establish the significance of an impact under CEQA, the decision must be based on scientific data, to the extent possible, and the rationale leading to the decision should be transparent in the CEQA document.

BIOLOGICAL HABITATS

Agricultural Fields, Developed Areas, Non-Native Grasslands, and Coastal Sage-Chaparral Scrub

CDFG and the Service disagree with the following less than significant impact determination for agricultural fields, developed areas, non-native grasslands, and coastal sage-chaparral scrub, on page 275 of the DEIR:

> ***Impact BIO-1:*** *The proposed project would result in the loss of agricultural fields, developed areas, non-native grassland, and coastal sage-chaparral scrub biological habitats. While the loss of agricultural lands is a significant land use impact it is not considered a significant biological impact because these lands are not considered to be sensitive biological habitats.* ***[Less than Significant Impact]*** (City 2007).

While we agree with the conclusion that these areas may not provide satisfactory long term habitat for native wildlife or plants, we disagree that there is little biological value inherent in these areas. There can be substantial benefits in maintaining these areas in open space. In particular, these existing land uses, although not ideal, are more conducive to plant and wildlife movement than the land uses proposed to replace them. In addition, they likely function as important movement and foraging areas for some species.

Potential impacts that the City did not take into consideration prior to making its less than significant impact determination include: loss of habitat (feeding, breeding, sheltering, etc.) occupied by special status and other species and loss of linkages for plant and animal movement. This is particularly important in the regional context and cumulative analysis. In order to address this issue, data should be collected on the existing land use patterns of the area by the species potentially inhabiting them. This data could be obtained through a variety of means, including but not limited to, field surveys, literature reviews, coordination with local experts, and consultation with the Resource Agencies. The conclusion in BIO-1 itself that there is no biological impact because the lands are not sensitive biological habitats is incomplete since non-sensitive biological habitats can provide benefits as well, as described above, and the status of the habitat itself should be only one of the issues considered. The list of species potentially found in these habitat types (under Biological Habitats, beginning page 240) as well as the acknowledgement that they provide foraging value, are indications that the issue demands more analysis and discussion.

CDFG and the Service recommend expanding this section as suggested and ensuring the process and conclusions are clearly described, so that the public and commenting agencies can adequately evaluate the analysis.

This issue is inadequately addressed in all habitat types and the DEIR should be revised accordingly. Removal of significant portions of habitats from an area can reasonably be expected to cause changes in the local ecology. For example, removal of 93% of the known wetlands in a 7000 acre area will certainly have an effect on the plants and animals that depend on that area. Are there bat roosts nearby that are dependant on the wetlands and which might lose their primary foraging areas? How will the loss of a significant natural water source affect seasonal wildlife movements and plant germination? There are any number of impacts that can be predicted at a regional scale, but there is no discussion of these issues in the DEIR, no identification of impacts and no proposed mitigations. This is particularly important for animal movement analysis since particular habitats may provide opportunities for some animals to successfully complete crossings of the valley.

Wetlands and Open Water Habitats

Page 244 of the DEIR states that, "Amphibian and reptile species, including California tiger salamander and California red-legged frog may utilize seasonal wetlands as part of their dispersal corridor" (City 2007). This statement is not entirely correct. For example, while these two federally listed species tend to travel in fairly direct paths during dispersal, those paths do not necessarily become commonly traveled corridors. Successful dispersal and movement of plants and animals seem to correlate with landscape linkages that contain species-specific habitat components such as food, water, and cover. By "successful dispersal" we mean the movement of a plant or animal to a patch of habitat where it can survive and reproduce. However, these linkages may or may not be definable as corridors, especially if they consist of more than one movement

event. During movement from one area to another, an animal or animals may cover a very broad area in seemingly random directions; straight line movements are actually somewhat rare except where an individual or group can retain a memory of a specific path.

Table 4.6-5 on page 275 indicates that implementation of the CVSP would impact 137 of 148 known wetlands. In addition, there would be a loss of 8 acres of pond habitat and 18 acres of streams. While some of these impacts would be the result of restoration and enhancement efforts on Fisher Creek, the majority would not. The DEIR should be revised to emphasize that impact acreages to wetlands, ponds, and streams are preliminary since a U.S. Army Corps of Engineers (USACE) jurisdictional delineation was not issued for the entire project area; only the accessible portion of the project area was verified by USACE. As indicated previously, the DEIR does not identify which areas were accessible. As such, impact acreages described in Impact BIO-2 on page 276 may increase after a complete wetland delineation is verified by USACE.

Furthermore, we disagree with the four mitigation measures offered to offset impacts to wetlands and open water. Our specific comments on MM BIO-2.1, MMBIO-2.2, MMBIO-2.3, MM BIO-2.4, and MM BIO-4.1 follow:

> ***MM BIO-2.1:*** *On-site creation of wetlands at a 1:1 (replacement:impact) ratio shall be required as part of the CVSP RMP, Wetland Mitigation and Monitoring Plan (WMMP) or similar document. A 1:1 replacement ratio is appropriate due to the degraded and farmed nature of the majority of the existing wetlands. The plan shall specify at least the following:*
> - *Wetlands shall be created concurrent with or prior to filling of existing wetlands*
> - *The use of locally native, wetland plant species, quantities for planting, irrigation and maintenance requirements, performance criteria, and annual monitoring method for a five-year period shall be described.*
> - *The majority of created wetland acreage shall be located within the relocated/restored Fisher Creek. If Fisher Creek cannot provide enough mitigation acreage, the Greenbelt shall be used to the extent feasible and based upon subsequent environmental review. If the Greenbelt is not used and mitigation sites outside of the CVSP Area are used, mitigation ratios shall be increased to a minimum of 2:1* (City 2007).

CEQA requires that a Lead Agency adopt a mitigation measure or measures for each impact determined to be significant (Guidelines (15126.4(a)). The measure or measures should be to avoid, minimize, rectify, reduce or eliminate the impact over time or compensate for the impact (Guidelines Section 15370). Mitigation measures should not be deferred to a future time but may be described as performance standards that might be implemented in one of a number of ways (Guidelines 15126.4(a)B). Mitigation measures should be enforceable (Guidelines 15126.4(a)2) and related to a legitimate government interest as well as being roughly proportional to the impact(s) (Guidelines 15126.4(a)4). Mitigation measures should also be specific, feasible actions that will actually improve adverse environmental conditions and measurable to allow monitoring (Bass *et al.* 1999). When mitigation measures are proposed, they should clearly identify what they are intended to accomplish, how they will be carried out, who is responsible for them, what standards will be met, and what measures will be implemented if the mitigation measures fail.

The DEIR does not contain adequate information to enable CDFG and the Service to determine if a 1:1 wetland creation ratio would be appropriate for the following reasons: 1) the City has not obtained a verified delineation from USACE, so the impacted acreage information is preliminary; 2) the City has not conducted a functional assessment of wetlands, so we cannot verify that the existing wetlands are "degraded;" and 3) the City has not conducted comprehensive field surveys to accurately identify effects to special status species inhabiting, or potentially inhabiting, wetlands and open water communities on site. Based on the information provided in the DEIR, we cannot at this time concur with the statement on page 291 that justifies a 1:1 creation ratio based on the "degraded and farmed nature of the majority of the existing wetlands" (City 2007). The majority of the wetlands depicted on Figure 4.6-1 seem to have an irregular shape and are not representative of typical, geometrical, agricultural field aerial signatures. We suggest that the results of the wetlands functional assessment, being carried out for the Section 404 Clean Water Act permit, be incorporated into the DEIR to substantiate the assertion that the wetlands on site are degraded.

Furthermore, we caution the reliance of off-setting adverse impacts through the creation of wetlands. In general, creating functional wetlands that are utilized by special status species is difficult and has proven unsuccessful in many previous projects. As such, we strongly recommend that MM BIO-2.1 be revised to require that the City 1) demonstrate that the proposed creation site(s) contain appropriate hydrology, soils, and topography that would support self-sustaining wetlands; 2) demonstrate that created wetlands will be hydrologically connected to each other and/or existing water features; 3) demonstrate that the individuals/agencies that will be responsible for creating the wetlands are qualified and have a history of creating functional wetlands; 4) demonstrate that the newly created wetlands are self sustaining and at a minimum, possess the habitat value of what was removed prior to impacts to existing wetlands; 5) ensure that the created wetlands are protected and managed in perpetuity with adequate funding, and 6) describe measures that will be taken in the event that created wetland success criteria are not met.

We also do not agree with the following statement: "The majority of created wetland acreage shall be located within the "relocated/restored Fisher Creek." Out-of-kind mitigation would not be appropriate in this case since the newly aligned Fisher Creek would function primarily as flood control. The project description does not clearly identify the inundation duration and frequency of the realigned Fisher Creek. However, we assume that it will be a perennial stream/flood control ditch. Seasonal wetlands, which are dry during a portion of the year, do not have the same ecological functions and values of a perennial stream/flood control ditch. As such, proposing the construction of wetlands within the newly realigned Fisher Creek is inappropriate. Furthermore, page 292 of the DEIR indicates that stream and irrigation ditch impacts would be "self-mitigated" by the relocation/restoration of Fisher Creek." The relocated/restored Fisher Creek should not be considered mitigation for both wetland and stream impacts.

> ***MM BIO-2.2:*** *On-site creation of streams at a 1:1 ratio shall be specified as part of the CVSP RMP, Stream Mitigation and Monitoring Plan (SMMP), or similar document. The plan shall specify at least the following:*

- *As much of the stream mitigation as possible shall be created within the relocated/restored Fisher Creek corridor or in tributaries to the creek corridor.*
- *Created streams shall be designed to incorporate natural stream characteristics such as meanders and pool and riffle complexes.*
- *If stream acreage and length cannot be replaced within the relocated/restored Fisher Creek corridor, planting of appropriate riparian vegetation along Coyote Creek or Fisher Creek in the Greenbelt (which are in the same watershed) at a 2:1 ratio shall be implemented. Appropriate native riparian plantings increase the functions and values of riparian habitat by providing habitat for riparian plant and animal species, stabilizing creek banks, limiting the ability of non-native species to invade riparian areas, and shading waters. If mitigation for stream acreage and length and/or area cannot be replaced within the CVSP Area, an off-site mitigation shall be accomplished by preservation of existing stream area and length at a 10:1 ratio, restoration and preservation of off-site stream area and length at a 3:1 ratio, or some combination of the two* (City 2007).

In general, our comments on MM BIO-2.1, regarding the creation of wetlands apply to MM BIO-2.2, regarding the creation of streams. CDFG and the Service also recommend removing the component of this mitigation measure that proposes planting additional riparian vegetation to compensate for the loss of channel habitat. Our first concern with this approach is that this is out-of-kind mitigation. Mitigation for impacted habitat, in this case a stream channel, should be in-kind unless the City demonstrates that out-of-kind mitigation would adequately offset impacts. Second, planting of riparian vegetation will likely be more beneficial to terrestrial species than aquatic species. In other words, aquatic species may be able to survive without riparian vegetation, but they clearly cannot without a channel. Finally, relying on the enhancement of riparian vegetation along Coyote Creek could be problematic since it would necessitate a great deal of coordination and planning and would need to be consistent with existing or planned habitat enhancements. Those areas are outside of the control of the City and may or may not be feasible. Please note also that this measure requires actions to be taken in the "Greenbelt." As described above, the DEIR does not describe the primary function of the "Greenbelt" and provides no assurances that the "Greenbelt" will be protected and managed in perpetuity for biological resources. Under current land use designations, it appears that activities that are not compatible with plant and wildlife management could occur. These activities include, but are not limited to, limited residential development, farming (including vineyards), and non-commercial recreation (i.e. equestrian use, all terrain vehicle use, and dirt bike use).

> ***MM BIO-2.3:*** *Mitigation for impacts to ponds shall be implemented as part of the CVSP RMP Wetland and/or Stream Mitigation Plans. Creation of ponds at a 1:1 ratio may be accomplished within the relocated/restored Fisher Creek corridor or within the Greenbelt. If mitigation for the loss of ponds cannot be accomplished within the CVSP Area, off-site creation of ponds at a 2:1 ratio will be required to reduce impacts to a less than significant level. If pond creation is not feasible off-site or on-site, planting of riparian vegetation at a 3:1 ratio, planted acreage to impacted acreage, or other appropriate aquatic restoration activities shall be implemented* (City 2007).

In general, our comments above regarding MM BIO-2.1 and MM BIO-2.2 also apply to MM BIO-2.3. We do not concur that the DEIR contains this data since there is no discussion of the specific impacts of pond removal. For example, if ponds contain CTS or CRLF, impacts could include take of individuals; disruption or destruction of a key

portion (or all) of a local metapopulation; loss of components of a movement area that could sever movement opportunities; loss of aquatic prey base; loss of breeding habitat and others. Planting riparian vegetation would not offset these impacts. Unless the CVSP can be revised to demonstrate that out-of-kind mitigation is appropriate, we do not believe that planting riparian vegetation would adequately offset the impacts associated with the permanent loss of pond habitat.

This measure also considers actions to be taken in the Greenbelt and our concerns related to the "Greenbelt" apply to this measure also.

> ***MM BIO-2.4:*** *To prevent impacts to wetlands and streams due to construction of the Highway 101 bridge connections over Coyote Creek, a delineation of wetlands and waters shall be completed in areas proposed for construction. Where possible, impacts to wetlands and streams shall be avoided by placing bridge piles outside of jurisdictional waters and avoiding wetland areas during road construction. If the impacts to wetlands and steams cannot be avoided during construction, all impacts shall be subject to the provisions of Mitigation Measures 4.6-1 through 4.6-3* (City 2007).

In general, our comments above regarding MM BIO-2.1 also apply to MM BIO-2.4. Our previous comments made about the City's failure to meet CEQA requirements are particularly relevant to MM BIO-2.4. In addition, the mitigation measures referenced above appear to be incorrect. The reference to "Mitigation Measures 4.6-1 through 4.6-3" should be replaced with "MM BIO-2.1 through 2.3."

> ***MM BIO-4.1:*** *To prevent impacts resulting from the creation of groundwater recharge basins in the Greenbelt, basins shall be placed in areas where no existing wetlands, streams, or ponds will be impacted. If impacts to these wetland and open water habitats cannot be avoided, MM BIO-2.1, 2.2, and 2.3 shall be implemented. In addition, to minimize water quality and non-native species impacts, basins shall not be placed in areas where they could outlet to Fisher Creek or Coyote Creek and MM BIO-3.1 shall be implemented* (City 2007).

This measure is appropriate, but should be expanded due to the concerns we previously raised regarding MM BIO-2.1, 2.2, and 2.3. In addition, MM BIO-4.1 would not address inherent species issues raised by the creation of additional recharge basins. For example, a detention basin that does not empty relatively quickly (i.e. within 24 hours), could attract special status species, such as CTS and/or CRLF, that may then not be able to survive or successfully reproduce if the basin dries prior to the completion of the species' life cycle. Another potential issue, not addressed by MM BIO-4.1, is the potential for recharge basins that hold water for a relatively long duration, subsequently attracting non-native predators, such as bullfrogs (*Rana catesbeiana*), which are known to outcompete special status species such as CTS and CRLF. The DEIR should include a discussion regarding how these potential effects to listed species as well as non listed aquatic species will be avoided.

Central Coast Cottonwood-Sycamore Riparian Forest

The description of central coast cottonwood–sycamore riparian forest, provided on page 245 of the DEIR, should note that this vegetative community has been identified as a G1/S1.1 community in the CNDDB (2006). This classification means that the

community is very threatened, with less than 2,000 acres remaining. The DEIR should also be revised to indicate that only in-kind mitigation would be appropriate due to the extreme rarity of this vegetative community. We believe that the rarity of this vegetative community warrants the development of measures that would specifically avoid impacts. In addition, the City should avoid lumping mitigation for this vegetative community with other riparian mitigation, if impacts are unavoidable.

Coast Live Oak Woodland, Valley Oak Woodland, and Serpentine Grassland

Page 278 of the DEIR indicates that other unidentified impacts to sensitive biological communities could occur as a result of the placement of water tanks and access roadways in the foothills of the Santa Cruz Mountains, located outside of the current project boundary. Since the City has not determined the location of the water tanks and its associated access roads, the DEIR indicates that significant impacts could occur to serpentine grassland, valley oak woodland, and coast live oak woodland. Since these water tanks are a necessary part of the proposed project, the revised DEIR needs to identify a preferred alternative for these water tanks so that impacts to these vegetative communities and the special status species that depend on them, can be analyzed and appropriate mitigation can be proposed. We do not believe that the following mitigation measure, on page 295 of the DEIR, would adequately offset the effects to serpentine grassland:

> *MM BIO-6.2: To mitigate for direct impacts (development of habitat) to serpentine grassland, preservation and management of serpentine grassland shall be accomplished through establishment of a serpentine grassland preserve, and preparation of a Preserve Management Plan or similar document. This plan may be integrated into the CVSP RMP, and shall include at least the following:*
> - *Establishment of appropriate management goals such as expansion or improvement of habitat through implementation of methods such as grazing.*
> - *Require annual monitoring of the Preserve for a ten-year period. The results of annual monitoring shall be presented in an annual report that discusses special status species populations, vegetation composition including non-native invasive species, comparisons of cover by native serpentine species and non-native grasses and forbs, and shall recommend management actions that could improve or expand habitat for special status species.*
> - *The mitigation ratio for preservation of serpentine grassland areas adjacent to the CVSP Area shall be 2:1, preserved to impacted area. • If preservation of adjacent serpentine grassland areas is not feasible, a minimum ratio of 3:1, preserved to impacted area, shall be accomplished through establishment of an off-site preserve to be located when specific CVSP development is proposed. Locating this preserve within Santa Clara County shall be a first priority* (City 2007).

Based on the information provided in the DEIR, we cannot at this time concur with the City's assumption that a 2:1 mitigation ratio would adequately off-set the direct impacts to serpentine grasslands. The project proposes to destroy 62% (21 of 34 acres) of serpentine grasslands within the project area. The revised DEIR should identify how many acres of the 21 acres of impact are located within bay checkerspot butterfly (*Euphydryas editha bayensis*) (bay checkerspot) critical habitat. Based on the information available to us, we believe a significant portion of the 21 acres are located within designated bay checkerspot critical habitat. We recommend the following

revisions to the proposed Preserve Management Plan for Serpentine grassland listed under MM BIO-6.2 : 1) delete reference to 2:1 mitigation ratio and/or provide a rationale for the 2:1 mitigation ratio; 2) add a procedure and schedule for acquisition and maintenance of serpentine grassland, similar to that described on pages 11-13, of the CVRP Biological Opinion (Service 2001a); 3) add a description of the adaptive management process; 4) add a description of the economic analysis conducted to demonstrate that the preserves will be adequately funded in perpetuity; 5) add a commitment that all impacts will be offset within the County; and 6) add a commitment to manage the preserve in perpetuity.

In addition to our comments on the Biological Habitats Section of the DEIR, we have many concerns regarding the analysis of special status plants and animals contained in Section 4.6.2.2 of the DEIR. Page 246 of the DEIR indicates that "areas adjacent to the CVSP Area were also reviewed to determine the potential for the proposed project to indirectly impact special status species" (City 2007). If surveys were conducted, the revised DEIR needs to identify 1) the location of surveys; 2) the protocols and techniques used; 3) the time of year and duration (# of seasons) surveyed; and 4) the results of these surveys. As indicated previously, the City's failure to provide this basic biological information severely weakens the validity of the impacts analysis and mitigation measures proposed in the DEIR. Our specific comments on plant and wildlife species follow.

SPECIAL STATUS PLANT SPECIES

As noted above, CDFG and the Service do not believe the DEIR adequately evaluates the potential effects to special status plants, primarily because a large area of the CVSP was not directly accessible to the City's environmental consultants. We disagree with the City's conclusion that the proposed project would have a less than significant impact on Mount Hamilton thistle (*Cirsium fontinale* var. *camplyon*). Since only 42.5% of the CVSP area was accessible, CDFG and the Service cannot at this time concur that with the statement on page 278 that "Mount Hamilton thistle ...is the only special status plant species known to occur in the CVSP Area" and that "the only known occurrence in the CVSP Area is in the Greenbelt" (City 2007). Moreover, we disagree with the statement on page 278 that indicates that "No direct (from development) or indirect (from nitrogen deposition) impacts are expected to occur to Mt. Hamilton thistle as a result of implementation of the CVSP. The Greenbelt area will not be developed as part of the CVSP and because Mt. Hamilton thistle occurs primarily in streams in serpentine soils, it is not likely to be affected by increased nitrogen deposition because non-native annual grasses are not as prevalent in these areas" (City 2007). Biologists at the Santa Clara Valley Water District, who are familiar with the vegetative communities in the CVSP area, indicated that although exotic grasses are less common in obligate wetland environments, such as those found in stream channels, exotic grasses are known to occur in seeps and at the edges of streams in the County, where the soil is moist but not inundated (Austin and Hillman pers. comm. June 18, 2007). As such, we do not believe that the City's conclusion that the species will not be affected by nitrogen deposition is substantiated. In fact, non-native grasses fertilized by increased nitrogen deposition

could potentially confine the distribution of Mt. Hamilton thistle (Austin and Hillman pers. comm. June 18, 2007). Our specific comments on mitigation measures for impacts to special status plant species follow:

> ***MM BIO-8.1:*** *Implementation of MM BIO-8.2 and MM BIO-27.1 (indirect impacts) provide sufficient mitigation for lost habitat for special status plant species known to occur adjacent to the CVSP Area. Known populations of special status plant species will be monitored as part of the Preserve Management Plan or CVSP RMP. Recommendations for management actions that could improve habitat or increase the populations of special status species within any off-site preserve will be included in the Management Plan* (City 2007).

Additional information should be provided in order for CDFG and the Service to determine if this is an effective mitigation measure. Supplemental information should at a minimum, identify 1) impacts to special status plants,;2) rationale supporting impact analysis; and 3) rationale supporting the adequacy of mitigation measure(s). In addition, the DEIR should include information regarding whether special status plants in the CVSP are part of the same populations adjacent to the CVSP area. If they are not, a discussion regarding where these plants are should be included. If they are part of the adjacent populations, information regarding access to these populations for monitoring purposes should be added to the DEIR, along with what the proposed monitoring plan will be and what, if any, mitigation is proposed. The revised DEIR should also identify criteria for maintaining these populations and what actions would be implemented if they are not met.

> ***MM BIO-8.2:*** *In order to prevent take of bent flowered fiddleneck and big scale balsamroot surveys shall be done in portions of the CVSP Area which have not been previously surveyed and contain appropriate habitat for these species. If these species are found in the CVSP Area, the population and supporting habitat will be preserved if feasible. If preservation is not feasible, populations will be transplanted to suitable habitat in the Greenbelt or other land preserved for this project and monitored for five years. Transplantation of populations may be accomplished by relocating individual plants or through seed collection and dispersal, or a combination of both, to be determined based on species habitat requirements, lifecycle, and best available science* (City 2007).

The inclusion of the phrase "if feasible" deems this measure optional and the protection of special status plants are therefore left to the complete discretion of the City. As such, we do not believe this mitigation measure is adequate under CEQA or appropriate. This measure could be improved if the City protected and managed in perpetuity, with adequate funding, special plant populations, and the habitat on which they depend. Furthermore, we caution reliance on transplanting plant populations. CDFG and the Service generally consider transplantation as experimental and would not consider transplanting as a form of mitigation unless the City is able to provide substantial evidence to demonstrate that transplanting is likely to be successful. This would require the City to 1) provide data regarding successful species-specific (or related species) transplantation methods; 2) obtain qualified scientist(s) to carry out the transplantation; 3) demonstrate that relocation sites would support transplants; and 4) ensure that relocation sites are protected and managed in perpetuity. Alternatively, the City may wish to investigate other options for mitigation, such as protecting existing populations of the same species.

Furthermore, MM BIO-8.2 indicates that special status species may be transplanted to suitable habitat in the "Greenbelt." As stated previously, we cannot at this time concur that the relocation of special status species in the "Greenbelt" would be appropriate, since there are no assurances that the "Greenbelt" will be managed for plant and wildlife.

In addition to our comments above, we noted several significant species omissions from the impact analysis for special status plants. The following plant species are proposed for coverage under the developing HCP/NCCP. Subsequently, the revised DEIR needs to demonstrate that the proposed CVSP will not preclude the conservation of these plants.

- Most Beautiful Jewelflower (*Streptanthus albidus* ssp. *peramoenus*): We disagree with the assessment in Appendix B of the Biological Resources Report (Appendix G of DEIR), that most beautiful jewelflower is unlikely to occur in the project area. This species was found just west of the project area, in a serpentine outcrop that extends into the project area (see Figure 4.6-1 and Figure 4.6-2 in the DEIR). A total of 34 acres of serpentine habitat occurs on site. Although protocol surveys were conducted, Appendix B of the Biological Resources Report acknowledges that the surveys were limited to "accessible portions of the Plan Area." Since the DEIR does not disclose the location of "accessible portions" of the project area, we cannot at this time concur with the assumption that this proposed covered species is unlikely to occur in the CVSP project area. Protocol level surveys should be conducted on ALL suitable habitat in the project area, prior to impacts, and appropriate avoidance and mitigation measures need to be approved by CDFG and the Service. The DEIR should also be revised to analyze indirect effects to serpentine plant species, such as the most beautiful jewelflower. Impact BIO-29, on page 289 of the DEIR acknowledges that the proposed project would result in a significant impact on serpentine endemic plant species (including the most beautiful jewelflower) as a result of nitrogen deposition.

- Smooth Lessingia (*Lessingia micradenia* var. *glabrata*): See comments above for most beautiful jewelflower.

- Santa Clara Valley Dudleya (*Dudleya setchellii*): Santa Clara Valley dudleya is federally endangered. Our comments for this species are similar to those made above, for the most beautiful jewelflower. We add, however, that the impacts analysis for this species should include direct and indirect effects resulting from the Bailey-Over-the-Hill (BOH) proposed alignment.

- Fragrant Fritillary (*Fritillaria liliacea Lindl.*): We disagree with the assertion that fragrant fritillary is unlikely to occur in the project area (Appendix B in the Biological Resources Report). Potential habitat occurs within the north and mid Coyote Valley, primarily along the grassland and serpentine habitat located on the western edge of the project area. A total of 34 acres of serpentine habitat occurs on site. The elevation of these areas are within the

known range of the species. The species could also occur in the valley oak woodland on both sides of Bailey Avenue. The project area contains 54 acres of valley oak woodland. Protocol level surveys should be conducted on ALL suitable habitat in the project area, prior to impacts, and appropriate avoidance and mitigation measures need to be approved by CDFG and the Service.

SPECIAL STATUS ANIMAL SPECIES

Page 246 of the DEIR states the following:

> *A total of 20 special status wildlife species are either documented to occur or have a high potential of occurring within the CVSP Area. These species are listed in Table 4.6-3, below. An additional 18 species were investigated and were found to have a moderate potential to occur, or are not present within the CVSP Area. These species are described in Appendix G and are not included in Table 4.6-3* (City 2007).

The information provided in this section does not appear to be entirely consistent with the information provided in Appendix G, which cites 16 species documented to occur in the Project Area, 5 are known to occur adjacent to the Project Area and 17 could occur in the Project Area. This section should be reviewed and the discrepancies corrected.

CDFG and the Service disagree with the following statement, on page 279 of the DEIR:

> *It should be noted that direct and indirect impacts to these species would only occur if the animals are present on or adjacent to properties that are the subject of this EIR. As previously discussed, not all properties were accessed; therefore, some properties will require additional analysis prior to development. If special status animal species are not present on the properties during protocol-level surveys (for species that could occur on the sites), then impacts would likely not occur. Additional analysis may be needed over the course of the CVSP build-out due to changes in the list of special status animal species* (City 2007).

Animal ecology does not take into account property lines and jurisdictional boundaries and it is inappropriate to restrict biological evaluations in this manner. This is particularly true for larger projects, like the CVSP, that may affect essential behaviors such as feeding, sheltering, breeding, and migration, of a regional population of a species. Furthermore, survey data, although useful, have many shortcomings. For example, lack of survey data is often, as in this case, misused to support a species' absence from a project area. Negative surveys do not necessarily reflect a species' absence from a project area because 1) some species are difficult to detect (i.e. California tiger salamanders [*Ambysotma californiense*] [CTS] in underground burrows); 2) some species have a boom/bust population cycle, which may require multiple years of survey data (i.e. bay checkerspot); 3) surveys are often conducted during an inappropriate time of year (i.e. non-flowering season for a particular plant species); and 4) survey data may be tainted by human error (i.e. misidentification of species). Lack of data resulting from lack of surveys is not synonymous with negative surveys. The reverse is more likely to be true. CTS and CRLF aestivate in upland areas between ponds and these areas are critical to their survival. They are extremely difficult to locate in these areas and the

general procedure is to assume presence on parcels with suitable upland habitat within certain distances of ponds.

An area-wide population and impacts to that population should be assessed by evaluating the area, not specific parcels. The size of CVSP necessitates the area-wide issues be examined, impacts identified and mitigation measures proposed. If area access constraints cannot be resolved, the City should develop, in cooperation with the resource agencies, protocols for dealing with these issues while still providing a meaningful analysis. The DEIR must include an analysis on an area-wide scale, and we therefore disagree with the approach presented on page 279 because of the implications it has on mitigation strategies. The range of available future mitigation strategies for impacts on individual properties are much more constrained and much less likely to be coordinated on a landscape level once development decisions are made.

Central California Coastal Steelhead

MM BIO-9.1 for central California Coastal Steelhead (*Oncorhyncus mykiss*) contains three items that should be revised. First, the measure states that if bridge supports are placed in the creek, they will be placed in areas determined to be least likely to cause long term habitat degradation. While we agree that this is a reasonable approach, it should be further refined. As stated, there is no threshold or other criteria identified to determine what an unacceptable impact is; this measure could allow very significant impacts to the species. Merely stating that implementing action A, which has less impacts relative to action B, without acknowledging that action A could still result in significant impacts is not appropriate under CEQA. We recommend that this section be revised to include thresholds of significance and appropriate mitigation measures for potential impacts. Second, the in-stream work period for streams with salmonids or other high resource values is June 15 through October 15. Finally, CDFG generally requires a by-pass for a stream like Coyote Creek to have an open channel configuration. The use of coffer dams does not always result in an open channel by-pass. The text on page 296 should be revised to state that an open channel by-pass will be used unless the Resource Agencies concur that site-specific conditions make that technique more harmful to resources.

California Red-Legged Frog and Foothill Yellow-Legged Frogs

We have the following comment on the impacts analysis for (*Rana aurora draytonii*) (CRLF) and foothill yellow-legged frogs (*Rana boylii*) (FYLF). In addition to aquatic habitat, upland habitat utilized by the species must be evaluated and impacts must be mitigated. The impact section and mitigation measure should be modified to reflect this.

Page 280 of the DEIR states that "development within 200 feet of aquatic habitat occupied by these species would also result in loss of habitat and potential take of individuals" (City 2007). Please provide a citation for the 200 feet reference. The statement implies that CRLF and FYLF are restricted to within 200 feet of aquatic

habitat. Although 200 feet may be appropriate for FYLF, 200 feet is not supported by published literature for CRLF. Bulger, *et al.* (2003) documented CRLF approximately twice as far from aquatic habitat than is acknowledged in the DEIR. Moreover, Fellers and Kleeman (2007) cite a median distance of almost 500 feet for CRLF in their study, while and Fellers (2005) reported a few individuals moving up to 1-2 miles. Our comments on mitigation measures for CRLF and FYLF follow.

> ***MM BIO-10.1:*** *To determine areas of aquatic habitat occupied by CRLF and FYLF, protocol level surveys need to be performed in all portions of the Development Area where suitable aquatic habitat exists. Although surveys performed in 2003 are useful as background information, these survey results have expired and new survey protocols have been developed by USFWS for this species. Wherever possible, CRLF and FYLF habitat will be avoided and those areas containing CRLF and FYLF will be preserved. If fill of aquatic habitat occupied by CRLF and FYLF or surrounding upland habitat or other construction activity in occupied habitat is required, it shall be performed between July and November, during the non-breeding season. In addition, a USFWS-approved biologist shall relocate CRLF and FYLF, if present, to suitable preserved habitat with the permission of USFWS personnel* (City 2007).

CDFG and the Service believe this mitigation measure is incomplete for several reasons. First, in order to provide an accurate environmental baseline, the most accurate information should be used. Since the survey results expired in 2005 and the protocols used were revised by the Service in 2005, new surveys should have been conducted prior to the circulation of the DEIR. It is inappropriate for the City to propose the deferral of surveys to after the analytical and public review process required by CEQA is completed. New surveys should be conducted and this section revised, followed by a recirculation of the DEIR for public review. Please note that CDFG, not just the Service, must approve the relocation of listed species.

Next, the limitation of habitat destruction to the period between July and November is also problematic. While not placing fill in breeding sites during the breeding season should reduce impacts to CRLF during this time period, construction activities in an upland area between July and November would actually maximize the take of frogs in upland habitats, although actual moralities would be more difficult to quantify. Therefore we recommend effects to CRLF upland habitat be compensated for by either purchasing credits at a conservation bank, purchasing occupied habitat in-fee title, or setting aside appropriate habitat with a conservation easement. Note that the latter two options would need to be accompanied with a management plan and an endowment approved by CDFG and the Service to manage the site in perpetuity.

Finally, relocation of frogs also presents its own unique set of challenges. The City would first need to identify a suitable relocation site. Successful relocation requires local population size, trends, distribution, and status (i.e. health, demographics, etc.) data. These same factors would also need to be analyzed for the specific population proposed for relocation; this information is often unknown and is currently lacking in the DEIR. Furthermore, if not currently present in an area considered for relocation, the City would need to determine why the species is not present (i.e. identify threats, disease, isolation, etc.). Conversely, if currently present in the area considered for relocation, moving additional individuals into the area may exceed the site's carrying capacity, introduce

disease and parasites that may not currently be present, or disrupt the genetics in the already established population.

Moving an entire breeding population may have even greater implications. While the salvage and relocation of a population may be the only option if a proposed project will result in the loss of all habitat in a given area, it is likely to result in substantial losses in the translocated population, and may have significant effects on the local metapopulation. The loss of part of the genetic diversity, population numbers, breeding area(s), and migration area(s) will likely be significant and compensation for the loss of both breeding and upland habitat is recommended to minimize the effects to CRLF. This issue is not addressed in the DEIR. In addition, the DEIR does not describe success criteria regarding relocations, when relocations would be performed, or what measures would be implemented if the relocations were unsuccessful. According to one study by Rathbun and Schneider (2001), California red-legged frogs relocated during the wet season abandoned release sites and traveled long distances to return to capture sites over a short period of time. In the same study, a second relocation had similar results, with one individual traveling 1.7 miles back to its pond of origin over 32 days. Based on the information provided in the DEIR, CDFG and the Service cannot at this time, support the relocation of CRLF and/or FYLF. Breeding ponds, adequate adjoining upland areas, and migration areas should remain undisturbed.

The DEIR must provide substantial evidence of the baseline condition, potential impacts and inform the development of relevant, proportional mitigation measures. We do not believe this has occurred. The baseline condition information is too limited, resulting in an inadequate impact analysis and wholly inadequate mitigation. In order to provide a meaningful analysis under CEQA, either more data needs to be provided, or mutually agreeable alternative techniques should be developed with the Resource Agencies and other experts. Once this is done, the baseline condition should be adequately documented and a specific impact analysis completed on comparison of the proposed project to that baseline. Once this process is completed, the section should be redrafted and added to the DEIR for recirculation.

> ***MM BIO-10.2:*** *To offset impacts to aquatic, upland, or dispersal habitat containing CRLF and FYLF, the applicant shall provide off-site habitat conservation, either through a conservation bank and/or easement at a 3:1 ratio of like-habitat for every acre of occupied aquatic or upland habitat (within 200 feet of occupied aquatic habitat) filled or removed* (City 2007).

In general, the comments previously discussed for MM BIO-10.1 apply to MM BIO-10.2. Specific problems include the inadequate effects analysis and subsequent mitigation proposal. We also remind the City that the DEIR lacks the site-specific scientific data necessary for CDFG and the Service to assess the adequacy of the 3:1 compensation ratio for CRLF and FYLF.

> ***MM BIO-10.6:*** *A Management Plan for bullfrog and other invasive predatory species shall be prepared or integrated into the CVSP RMP. The Management Plan shall include measures for eradication and monitoring to control invasive aquatic predators* (City 2007).

This is a very good mitigation measure but should be expanded, since some of the activities necessary to carry it out could result in significant impacts. For example periodic draining of some aquatic habitats in order to eliminate bullfrog tadpoles may also result in take of CRLF, FYLF, and other special status aquatic species. Manual removal of adult bullfrogs and their egg masses requires a significant amount of manual labor and individuals carrying out these measures may trample CRLF and FYLF egg masses or larvae.

> ***MM BIO-10.8:*** *Where roadway widening or construction is to occur within a dispersal Corridor, culverts, causeways, bridges, and/or overpasses shall be incorporated into the design to allow wildlife, including special status aquatic species, to disperse under roads, thereby reducing road kills* (City 2007).

We appreciate that the City included MM BIO-10.8, which if properly implemented, would minimize adverse effects to CRLF and FYLF dispersal and migration. However, MM BIO-10.8 is extremely vague. The measure lists a suite of potential actions to minimize effects, but none of the measures are site-specific. See our comments below, for MM BIO-26.1, mitigation for impacts to wildlife movement.

> ***MM BIO-10.9:*** *Where high intensity lighting is to occur within or adjacent to CRLF and FYLF breeding or dispersal habitat, downcast lighting or other appropriate lighting technology shall be incorporated into the design to reduce potential negative effects on wildlife species* (City 2007).

This measure does not adequately minimize adverse effects to CRLF and FYLF. The majority of CRLF and FYLF movement occurs at night. We suggest that the measure be revised to define "high intensity lighting" and to also indicate that high intensity lighting will not occur within riparian corridors. Downcast lighting reduces light pollution at night by focusing light downward. This measure minimizes the effects to flying nocturnal animal species more than it does terrestrial and aquatic animals such as these frog species. Downcast lighting was also created to minimize light pollution, which is more of an aesthetic issue than a biological one.

<u>California Tiger Salamander</u>

The following statement needs to be revised on page 280: "In addition, fill placed in adjacent upland aestivation and dispersal habitat, which includes undisturbed areas containing small burrows and other underground habitat within 2,200 feet of occupied aquatic habitat, would significantly impact CTS" (City 2007). The 2005 Designation of Critical Habitat for the California Tiger Salamander, Central Population" states that, "examples of barriers are areas of steep topography devoid of soil or vegetation. Agricultural lands such as row crops, orchards, vineyards, and pastures do not constitute barriers to the dispersal of CTS" (Service 2005). As such, the significance of the impact should not be limited to "undisturbed" areas, since agricultural fields could be used for dispersal if located within known dispersal distance of aquatic habitat. Development of agricultural fields should thus be taken into consideration in the impacts analysis for this species, since an agricultural field may provide a critical link between 2 or more breeding ponds or a critical link between a breeding pond and upland refugia.

In general, our comments for the mitigation measures proposed for CTS are similar to those previously described for CRLF and FYLF. However, in this case, we concur that the 2,200-foot distance is a reasonable estimate for upland habitat disbursal.

Western Pond Turtle

As previously discussed for other animal species addressed in the DEIR, the analysis for western pond turtle (*Clemmys marmorata*) (WPT) is inadequate because the DEIR does not provide enough data to conduct an adequate impacts analysis and to assess the adequacy of mitigation measures. Our specific comments follow:

> ***MM BIO-12.1**: To determine areas of aquatic habitat occupied by WPT, surveys shall be performed in all portions of the CVSP Development Area where suitable aquatic habitat exists, including Coyote Creek. Wherever possible, turtle habitat will be avoided and those areas containing the species will be preserved. If avoidance of aquatic habitat occupied by WPT is not feasible, a CDFG-approved mitigation and monitoring plan shall be prepared that includes methodology for capture, relocation, and monitoring of western pond turtles* (City 2007).

Mitigation Measure MM BIO-12.1 has the same deficiency as the mitigation measures proposed for CTS and CRLF above. As indicated above, a reasonable analysis of potential impacts cannot be completed, nor can meaningful mitigation measures be developed without first understanding the actual distribution of the species in and around the CVSP area. Therefore, CDFG and the Service consider this section inadequate under CEQA.

> ***MM BIO-12.2:** Development or disturbance in upland oviposition habitats (uplands within 200 feet of occupied aquatic habitat) will likely impact turtle nest sites. Any construction activity to take place adjacent to occupied aquatic habitat shall be surrounded by exclusion fencing to prevent turtles from entering the construction area and daily monitoring and repair of the fence shall occur (City 2007).*

Please provide a citation for the 200-foot reference. Nesting has been known to occur up to 1,391 feet from water (Jennings and Hayes 1994). Please also reference Reese and Welsh (1997). We recommend that the revised DEIR add a work window for WPT that would avoid the breeding season. Nesting typically occurs between May and July and hatching/dispersal typically occurs between July and September (Jennings and Hayes 1994). However, we caution that focusing mitigation measures on oviposition sites does not guarantee that impacts would be reduced to a level of insignificance. For example, Reese and Welsh (1997) found that turtles moved up to 500 meters from aquatic habitat and spent a very significant part of the year in terrestrial habitats. Impact analysis and proposed mitigation measures should not be limited to particular life stages unless substantial evidence is presented supporting the validity of that approach.

In general, MM BIO-12.2 is a construction avoidance measure. Construction avoidance measures are intended to avoid or minimize harm or injury to specific individuals of a target species during construction. The City applies this type of mitigation measure somewhat sporadically throughout the DEIR. Construction avoidance measures are proposed for western pond turtle and steelhead but not for CTS or FYLF. We

recommend that the Biological chapter be reviewed to ensure that a full suite of construction avoidance measures be included for all species.

Bay Checkerspot Butterfly

We disagree with Impact BIO-13 on page 281, which indicates that the proposed project would have a less than significant impact on bay checkerspot because "the impacted critical habitat areas are located on developed land and agricultural fields, which do not contain [bay checkerspot] host or nectar plant species" (City 2007). The aerials available to us do not appear to coincide with the City's assertion that all designated bay checkerspot critical habitat within the proposed development area are developed or agricultural land. Please provide a current aerial photo overlaid with both a designated critical habitat layer and a proposed development layer. Please also provide a description of the surveys (i.e. time and method) conducted that support the assertion that bay checkerspot host and nectar plants are absent.

Based on the information provided in the DEIR and otherwise available to us, proposed development would permanently remove portions of bay checkerspot Critical Habitat Unit 7 (Kalana Hills Unit) and Critical Habitat Unit 14 (Santa Teresa Hills Unit). According to Figure 2.0-1, the areas north and west of the IBM facility, located in the Santa Teresa Hills Unit, would be developed with industrial/workplace and residential development and the area on the western project boundary near Richmond and Scheller Avenues, located in the Kalana Hills Unit, would be replaced with low/medium density residential housing. Dr. Richard Arnold observed adult bay checkerspot butterflies on the IBM facility and observed an unspecified number of adult bay checkerspot butterflies in Santa Teresa County Park in 1992 (Arnold pers. comm. January 8, 2007).

We are also concerned that the City based its less than significant impact determination for impacts to bay checkerspot on one Primary Constituent Element (PCE) for designated critical habitat, host and nectar sources. The "Final Determination of Critical Habitat for the Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)," indicates that PCEs for bay checkerspot include one or more of the following: "Stands of *Plantago erecta, Castilleja exserta*, or *Castilleja densiflora*; spring flowers providing nectar; pollinators of the bay checkerspot's food and nectar plants; soils derived from serpentinic rock; and space for dispersal between habitable areas" (Service 2001b). GIS data produced for the HCP/NCCP indicates that "soils derived from serpentinic rock" are present in the Kalana Hills and Santa Teresa Hills Units. In addition, the Service considers dispersal a crucial function for a species with metapopulation dynamics like the bay checkerspot. Therefore, project-related impacts to portions of critical habitat that do not support the species' breeding, feeding, or sheltering should be considered significant if they link suitable habitat. These areas were included in critical habitat designations since connectivity amongst the landscape is necessary to facilitate movement of individual bay checkerspots between habitat areas and are important for dispersal and gene flow (Service 2001b). The Final Determination of Critical Habitat also states that "the following are each primary constituent elements to be conserved when present in combination with one or more of the primary constituent elements above: areas of open

grassland, topography with varied slopes and aspects providing surface conditions with warm and moderate to cool temperatures during sunny spring days, stable holes or cracks in the soil and surface rocks or rock outcrops, wetlands providing moisture during times of spring drought" (Service 2001b). We believe that at a minimum, areas of open grassland and wetlands, as depicted on Figure 4.6-1 are present in and adjacent to designated bay checkerspot critical habitat in the proposed development area.

Furthermore, we also disagree with the City's "less than significant impact" assessment for bay checkerspot because it does not account for habitat degradation resulting from nitrogen deposition. The nitrogen deposition analysis contained in the DEIR is inadequate because it does not utilize the best available scientific data, it contains conflicting data, and it does not adequately justify the proposed mitigation. The assumptions and the impact analysis contained in the DEIR do not appear to represent the best scientific data available. For example, we disagree with the assumption on page 287 that indicates that "the amount of nitrogen deposition in serpentine grasslands that would affect change in habitat structure has yet to be established through scientific study. Therefore, no threshold of significance has been established for nitrogen emissions and deposition" (City 2007). Although there is no empirical threshold for effects associated with nitrogen deposition, the U.S. Department of Agriculture believes that the threshold of annual nitrogen deposition rates that can potentially impact sensitive plant communities is approximately 3-10 kg/ha-yr (1992). Although these are vague guidelines and should not be misinterpreted as a critical load, it is consistent with Dr. Stuart Weiss, Creekside Center for Earth Observation, estimate for the threshold for effect to serpentine ecosystem structure and diversity at the Edgewood Park bay checkerspot Critical Habitat Unit, which was 5 kg/ha-yr (Weiss pers. comm. December 29, 2006). Consequently, we believe that the 5 kg/ha-yr estimate developed for the Edgewood Park Unit represents the best available scientific data available for both San Mateo and Santa Clara counties. We consider any additional nitrogen deposition to an already stressed ecosystem as significant.

In addition, the nitrogen deposition analysis contained in the DEIR relies heavily on data generated by the CALINE-4 Dispersion Model and URBEMIS2002 Model, which we do not believe generate the best available scientific data for analyzing nitrogen deposition impacts. According to the information provided in the DEIR, the CALINE-4 Dispersion Model provided estimates for carbon monoxide emissions resulting from CVSP. Although the URBEMIS2002 Model provided estimates of Reactive Organic Gas (ROGs), nitrogen oxides (NOx), and Particulate Matter, 10 microns in size (PM10), it did not estimate ammonia (NH_3) emissions. Although these models provide important information about regulated air pollutant emissions, the data generated are not robust enough to conduct an adequate nitrogen deposition impact analysis. The nitrogen deposition impact analysis in the DEIR is therefore fundamentally flawed because it does not consider the effects of NH_3, a byproduct of vehicular catalytic converters. Ammonia is one of the most reactive species of nitrogen, aside from nitric acid (HNO_3). HNO_3 and NH_3 have the highest deposition velocities of all the major atmospheric nitrogen species because they readily dissolve in water, including thin films that remain on apparently dry surfaces (Weiss 2006). Furthermore, non-native invasive plants species such as Italian

ryegrass (*Lolium mulitlorum*), which commonly outcompetes endemic serpentine plant species, absorbs and assimilates atmospheric NH_3 through stomata (Sommer and Jensen 1991 & Weiss 2006). Although more abundant than NH_3, NO_2 is relatively insoluble in water and usually has deposition velocities an order of magnitude lower than HNO_3 and NH_3 (Weiss and Tonnesen pers. comm. December 8, 2006). Nitrogen oxide (NO), which constitutes approximately 90% of emissions, is even less reactive than NO_2 (Tonnesen pers. comm. December 8, 2006).

The Community Multiscale Air Quality (CMAQ) modeling system, developed by EPA, represents the "state-of-the-science" capabilities for modeling multiple air quality issues including tropospheric ozone, fine particles, toxics, acid deposition, and visibility degradation and thus provides a more complete analysis of impacts (EPA 2006, Tonnesen pers. comm. June 7, 2007). We believe the CMAQ model would generate the best available scientific data because it contains the following types of modeling components: 1) a meteorological modeling system that describes the atmospheric states and motions; 2) emissions models for man-made and natural emissions that are introduced into the atmosphere; and 3) a chemistry-transport modeling system that simulates chemical transformation and fate (EPA 2006). In order to minimize overestimates in the speed of dispersion and spread of nitrogen deposition over a greater area, which would result in underestimating local impacts, we recommend that a fine grid resolution (i.e. 1 km) be utilized in the CMAQ modeling analysis for CVSP (Tonnesen pers. comm. June 7, 2007). Although the ISCST3 Model was previously used for similar impact analysis, we no longer believe ISCST3 would provide the best available scientific data. NO represents approximately 90% of NOx emissions and has a relatively low deposition velocity (Tonnesen pers. comm. June 7, 2007; Tonnesen pers. comm. December 8, 2006). As such, simple dispersion models, like the ISCST3, do not accurately simulate nitrogen deposition because they do not account for the conversion of NO to HNO_3, which has a more rapid deposition velocity (Tonnesen pers. comm. June 7, 2007).

In addition to utilizing the best available scientific data, we recommend that the City rectify conflicting data contained in the DEIR. One of the most troublesome inconsistencies contained in the DEIR is differing estimates of NOx/day resulting from the CVSP. Table 4.4-3 on page 213 indicates that the project would result in 448 lbs NOx/day, the last paragraph on page 287 indicates that the project would result in 848 lbs of "nitrogen emissions" per day, and Table 5 of Appendix E indicates that the project would result in 773.2 NOx/day (City 2007). These discrepancies seriously affect the credibility of the City's nitrogen deposition analysis. Conflicting data was also evident in the references for the DEIR. For example, page 205 indicates that the Air Quality Section (Section 4.4) of the DEIR is based on an October 2006 air quality report prepared by Don Ballanti, located in Appendix E. However, Appendix E in the DEIR is a January 2007 report written by an unidentified author. Page 532 of the References Section (Section 10.0) then indicates that Illingworth & Rodkin, Inc. wrote the January 2007 report found in Appendix E. Conflicting data was also manifested in the City's coordination, or lack thereof, with recognized experts in the scientific community. Notably, the City verbally indicated on numerous occasions, that it was extensively coordinating with Dr. Edith Allen, University of California, Riverside (Boyd *et. al* pers.

comm. January 11, 2007; Boyd *et. al* pers. comm. April 19, 2007) regarding the indirect effects of nitrogen deposition resulting from CVSP. However, Dr. Allen was only marginally cited in the DEIR as a "person contacted." We have since coordinated with Dr. Allen, who indicated that she was not involved with preparing or reviewing the nitrogen deposition analysis section of the DEIR (pers. comm. June 4, 2007). Dr. Allen did, however, provide the City with recommendations regarding nitrogen deposition and mitigation for the Coyote Ridge conservation area. In her letter to Laura Moran, WRA Environmental Consultants, Dr. Allen recommended that the City use the same kind of air pollution modeling as was done for the Metcalf Energy Center (CalPUFF and/or CMAQ) (December 11, 2006).

Finally, the nitrogen deposition analysis contained in the DEIR is inadequate because it does not adequately justify the proposed mitigation (447 acres of serpentine preservation). The City's proposed impact analysis method, identified as "Method 1" in Appendix D of the WRA Biological Resources Technical Report, has several fundamental flaws. First, Method 1 indicates that CVSP would result in less NOx emissions (848.16 lbs of NOx/day) than the Coyote Valley Research Park (CVRP) (1,271 lbs of NOx/day). CVRP is contained within the larger CVSP project. Under the previously authorized CVRP project, 20,000 additional jobs were proposed. A total of 50,000 jobs (including the 20,000 jobs proposed under the CVRP) are proposed for the CVSP. Therefore, intuitively, we expect that the CVSP would result in more NOx emissions than the CVRP, largely because up to 30,000 additional employees would be commuting to the CVSP during the work week. The second flaw is the apparent inconsistency between the mitigation proposed under Method 1 for the CVSP and the mitigation proposed for the previously authorized CVRP/Bailey 101 project. The CVRP and Bailey 101 projects, included the preservation of 336 acres of serpentine grassland to offset nitrogen deposition impacts. Although the CVSP involves the addition of more than 2.5 times the number of jobs previously authorized under the CVRP, the City is proposing 1.3 times the compensation agreed to for impacts associated with CVRP and Bailey/101 projects (Service 2001a). Although we are not advocating a purely mathematical ratio between compensation acreage and the number of jobs being proposed, the compensation proposed for the CVSP appears intuitively low.

Upon reviewing the DEIR and further coordination with Dr. Stuart Weiss, Dr. Edith Allen, and Dr. Gail Tonnesen, UC Riverside, we believe it is appropriate to revise the Service's preliminary technical guidance to the City (pers. comm. between Chris Nagano and Bob Uram February 7, 2007) so that the best available science is utilized. We agree that the mathematical equation previously used to calculate nitrogen deposition for the CVRP no longer reflects the best scientific data available. We also agree with the City's general assessment that all species of nitrogen (i.e. NH3, HNO3, NOx) should be considered in the nitrogen deposition analysis for the proposed project. As such, we describe our revised recommendation below. A similar analysis is currently being used for the Los Esteros Critical Energy Facility and Don Von Raesfeld Power Plant Habitat Conservation Plans in Santa Clara County.

First, calculate the average deposition of all species of nitrogen for all critical habitat units in Santa Clara County and San Mateo County by integrating air quality and traffic data generated for the CVSP. As indicated above, we recommend the City reanalyze nitrogen deposition impacts using the CMAQ modeling system. Although the Service initially recommended that the City limit its nitrogen deposition analysis to Santa Clara County, we believe the Edgewood Park/Triangle, Jasper Ridge, and San Bruno Mountain critical habitat units, located in San Mateo County, should also be analyzed since page 213 of the DEIR indicates that "vehicle trips generated by the project would result in air pollution emissions affecting the San Francisco Bay and North Central Coast Air Basins (NCCAB)." Both San Mateo and Santa Clara counties are located within the San Francisco Bay Air Basin. Furthermore, page 146 of the DEIR indicates that, "based on the VTA model trip generation estimates, the CVSP project would generate approximately 302,780 daily new person trips, as shown on Table 4.2-7. Of all CVSP project trips, approximately 88% would be made by automobiles, 4% would be on transit, and 8% would be walk or bike trips...60% of the daily person trips generated by the project would originate or have destinations outside of the CVSP" (City 2007). Although designated bay checkerspot critical habitat does not account for all serpentine grasslands in San Mateo and Santa Clara counties, we believe that the majority of serpentine grasslands are included in the critical habitat designation and that it would be appropriate for the City to limit its scope of analysis to these areas. We also believe that analyzing impacts to bay checkerspot critical habitat would adequately analyze indirect effects to special status serpentine plants species such as, but not limited, to Santa Clara dudleya (*Dudleya setchellii*), Tiburon paintbrush (*Castilleja affinis* ssp. *neglecta*), Metcalf Canyon jewelflower (*Steptanthus albidus* ssp. *albidus*), and coyote ceanothus (*Ceanothus ferrisae*). The City's analysis should reflect the varying degrees of nitrogen impact amongst the 15 critical habitat units, which will likely vary depending on each unit's relative distance to CVSP.

Second, calculate the area of serpentine and serpentine-like (i.e., those grasslands that occur on soils with similar characteristics to serpentine soils) habitat contained within each critical habitat unit. Since the Service considers dispersal a crucial function for a species with metapopulation dynamics like the bay checkerspot, areas designated as critical habitat include areas that are not suitable for the species' breeding, feeding, or sheltering. These areas were included since connectivity amongst the landscape is necessary to facilitate movement of individuals between habitat areas and are important for dispersal and gene flow and thus, to the conservation of the subspecies (Service 2001b). Although these non-habitat areas are important for dispersal, the City's nitrogen deposition analysis should be limited to serpentine and serpentine like inclusions, since these are the areas that would be adversely affected by the fertilizing effects of nitrogen.

Third, calculate project-related nitrogen deposition in each critical habitat unit as a percent of ambient deposition. After speaking with Dr. Weiss in May 2007, we believe that the ambient deposition rate in the CVSP area is approximately 8.4 kg/ha-yr. However, site-specific ambient deposition should be verified by a qualified scientist.

Please coordinate with recognized experts such as Dr. Stuart Weiss, Dr. Edith Allen, and/or Dr. Gail Tonnesen.

Finally, calculate the affected acreage per critical habitat unit by multiplying the serpentine acreage of each bay checkerspot critical habitat unit by the estimated project deposition in that critical habitat unit, as a percent of ambient deposition. Consistent with the bay checkerspot recovery strategy in the "Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area," (Service 1998) and the CVRP Biological Opinion (Service 2001a), we recommend that 3 times the affected acreage should be protected and managed in perpetuity to offset the indirect effects to designated critical habitat within Santa Clara County. We believe a 3:1 mitigation ratio would be appropriate for the following reasons: 1) nitrogen deposition resulting from increased vehicular traffic will occur in perpetuity and its effects will be cumulative and 2) all critical habitat units within Santa Clara County are considered essential to the recovery of bay checkerspot, either explicitly or implicitly[1]. Lands acquired in fee-title or via conservation easement would need to be located within the County in which impacts occur. The Service will work with the City after it analyzes nitrogen deposition effects on the three San Mateo County bay checkerspot critical habitat units to determine appropriate mitigation, if any. The following table is provided to assist the City with revising its nitrogen deposition effects analysis, as described above.

[1] The "Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area" lists "Other current or historic localities or suitable habitat areas, generally larger than 1 hectare (2.5 acres), within the historic range of the butterfly, identified for their habitat value, function as dispersal corridors, proximity to other habitat, or other biological value" as #5 on the Service's list of bay checkerspot habitat areas ranked in approximate order of priority relative to recovery (Service 2001b). Therefore, critical habitat units such as San Martin and Bear Ranch, although not explicitly prioritized in the Recovery Plan, are implicitly included.

Estimated Potential Effects Acreage

	A	B	C	D	E
Critical Habitat Unit	Unit Acres (Service 2001b)	Acres of serpentine habitat[a]	Average deposition (kg/ha-yr)[b]	Project deposition as a percent of background[c]	Effects acreage[d]
Edgewood	535	476			
Jasper Ridge	709	642			
San Bruno Mountain	748	704			
Bear Ranch	617	617			
Communication Hill	443	369			
Kalana Hills	244	82			
Kirby	6912	3746			
Morgan Hill	724	431			
Metcalf	3351	1224			
San Felipe	998	595			
Silver Creek	787	400			
San Vicente-Calero	1875	272			
San Martin	586	586			
Santa Theresa Hills	4500	1296			
Tulare Hill	876	308			
Total (acres)	23,903	11,748			

[a] Service's estimate. Coordinate with Stuart Weiss to verify current serpentine acreages

[b]Average deposition per habitat unit, from CMAQ

[c]Verify ambient deposition/ critical habitat unit or assume 8.4 kg/ha-yr, so D = C/8.4.

[d]Effects acreage is calculated as critical habitat unit acres times project deposition as a percent of background (E=B*D)

Great Blue Heron, Long-Billed Curlew, and Tricolored Blackbird

Based on the information provided, we disagree that the proposed project would have a less than significant impact on great blue heron (*Ardea herodias*) and tricolored blackbird (*Agelaius tricolor*). According to Impact BIO-13, on page 281 of the DEIR, the project would have a less than significant impact on great blue heron, long-billed curlew (*Numenius americanus*), and tricolored blackbird, all of which are known to occur in the project area. However, the discussion on page 281 does not substantiate the less than significant impact finding for the great blue heron or tricolored blackbird, both of which are year-round residents in the project vicinity (Sibley 2003). Fisher Creek, Coyote Creek, Ogier ponds, wetlands (including flooded agricultural fields, Laguna Seca, and

smaller wetlands within the proposed development area), and upland fields may provide suitable foraging habitat for the great blue heron. Page 24 of Appendix G indicates that a rookery was documented near the percolation ponds in the "Greenbelt" in 1991 and that it is "highly likely" that great blue herons nest along the Coyote Creek riparian corridor (City 2007). Tricolored black bird is a proposed covered species under the HCP/NCCP. Page 26 of Appendix B of the Biological Technical Report, indicates that the species was documented near Ogier Ponds in 2002 and that suitable habitat occurs along Coyote and Fisher creeks (City 2007). In addition, tricolored blackbirds may winter and forage in existing wetlands, ponds, and farmland. Impacts to breeding and winter foraging habitat types for these species should be considered significant impacts, especially for the tricolored blackbird, which is locally rare.

Western Burrowing Owl

The DEIR acknowledges the direct loss of up to 1,130 acres of western burrowing owl (*Athene cunicularia hypugea*) habitat in the CVSP area and notes that burrowing owls have been seen in the area. Our comments on specific mitigation measures follow:

> ***MM BIO-15.2:*** *Active Relocation: Prior to construction, during the non-nesting season, any owls occupying burrows within the construction zones can be actively relocated as partial compensation for impacts to on-site burrowing owl habitat. An active relocation would be preferred over passive relocation in the event that any off-site mitigation alternative for impacts to burrowing owl habitat is chosen. Although the CDFG has historically recommended only passive relocation, which is the preferred method of relocation, active Coyote Valley Specific Plan 301 Draft EIR City of San José March 2007 relocations may be considered if sufficient information can be provided that such active relocations have been successful* (City 2007).

As indicated previously, CDFG and the Service consider relocation as an experimental technique. Jack Barclay, Albion Environmental, Inc., has surveyed burrowing owls in Santa Clara County for many years. According to Barclay, relocation of burrowing owls in Santa Clara County has been relatively unsuccessful. Although past relocation efforts within the County were successful as a way to remove owls from development sites, efforts were unsuccessful in getting relocated individuals to breed (Barclay pers. comm. June 20, 2007). The City would need to demonstrate that relocated burrowing owls would not only survive relocation, but would also remain in the general vicinity of the relocation site and successfully breed in order for CDFG and the Service to consider this an appropriate mitigation measure for the species. We encourage the City to refer to Feeney's "Burrowing Owl Site Tenacity Associated with Relocation Efforts," which discusses the results of several burrowing owl relocation projects in California (1997). Feeney found that many relocated owls returned to relocation sites. Based on the little information provided in the DEIR and information otherwise available to us, we cannot at this time concur with the relocation of burrowing owls.

Page 300 of the DEIR proposes MM BIO-15.4 through 15.6 to offset the impacts associated with the loss of burrowing owl habitat:

> *If they are found to be feasible, the following measures would avoid/mitigate for the loss of Western Burrowing Owl habitat that would result from the development of the CVSP. These*

measures would be implemented if the City Council determines the measures to be feasible and requires them as conditions of approval. In the event the mitigation is determined to be infeasible, adoption of a statement of overriding considerations will be required (City 2007).

Our specific comments follow:

MM BIO-15.4: *Avoidance: Compensation for the loss of Burrowing Owl habitat typically requires that 6.5 acres be set aside per resident pair or per resident individual. Based on the number of owls occupying habitat at the time of development, complete avoidance of impacts resulting from a loss of Burrowing Owl nesting habitat would include setting aside an appropriate amount of conservation easements, with deed restrictions that guarantee preservation of the easement as burrowing owl habitat into perpetuity. As part of this measure, a Mitigation and Monitoring Plan would be developed and implemented in consultation with the City of San José and CDFG to manage the easement site for owls.*

MM BIO-15.5: *Off-site Mitigation Within the Region: Full or partial compensation for impacts to Burrowing Owl habitat can also occur in the form of purchasing sufficient credits at a mitigation bank that services the area, or purchasing and setting aside an appropriate amount of suitable habitat in the City of San José, or some combination of on-site and offsite mitigation that equals the appropriate amount of habitat required. If the mitigation is to be done partially on-site and partially off-site, however, it should be noted that relatively small habitat areas left on-site (i.e., less than 13 acres), would be considered insufficient mitigation unless they are contiguous with suitably protected open space areas. In the case of the CVSP Area, which is surrounded by rural and open space areas, contiguous open space areas may be available. Additionally, although it would lessen impacts to owls overall, complete or partial mitigation that occurs off-site and outside of the local area (i.e., outside of Santa Clara County) would result in a significant unavoidable loss of Burrowing Owl nesting and foraging habitat in the local area. At this time, there are no known mitigation banks within Santa Clara County that offers credits for Burrowing Owl habitat. There may, however, be vacant land available that is suitable as Burrowing Owl habitat elsewhere in Santa Clara County.*

MM BIO-15.6: *Off-site Mitigation Outside of Region: Impacts to Burrowing Owl habitat would be partially compensated through off-site mitigation outside of the region (i.e., outside of Santa Clara County), either by purchasing sufficient credits at an established mitigation bank or by purchasing and setting aside sufficient acreage of lands outside of the region for burrowing owl habitat management.*

The implementation of either MM BIO-15.4 or MM BIO-15.5 (if lands were purchased locally) would fully and adequately offset/reduce impacts to Burrowing Owl habitat to a less than significant level. The implementation of MM BIO-15.6 alone would not reduce impacts to local Burrowing Owl habitat to a less than significant level; however it would further reduce impacts if implemented along with MM BIO-15.4 or MM BIO-15.5 (City 2007).

As we read it, this section is saying that the above mitigation is to be implemented to compensate for the loss of burrowing owl habitat, unless it is determined to not be "feasible." If it is determined to be infeasible, Findings of Overriding Consideration will be applied and there will be no mitigation. Adoption of Findings of Overriding Consideration (CEQA Guidelines Section 15093) are the potential end of a longer process which is described in CEQA Guidelines Section 15091, Findings which states:

(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant

effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

(1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

(b) The findings required by subdivision (a) shall be supported by substantial evidence in the record.

(c) The finding in subdivision (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subsection (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.

(d) When making the findings required in subdivision (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.

(e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.

(f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

Pursuant to this section then, the City must make one or more of the findings in 15091(a) for each identified significant impact in CEQA documents presented to the City Council, before it can approve the project. According to 15091(c), whatever finding is made must be supported by substantial evidence in the record. This process governs the adequacy of the mitigation measures and the EIR itself. The Findings of Overriding Considerations process is ancillary to this process.

As noted previously, 'Substantial Evidence' includes fact, a reasonable assumption predicated on fact or expert opinion supported by fact. This means that there is enough relevant information that a fair argument can be made to support a conclusion, even though alternative conclusions may also be reached. Argument, speculation,

unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence (CEQA Guidelines Section 15384(a)).

In order to determine that these mitigation measures were infeasible, the City Council would have to provide substantial evidence that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make acquisition, protection and management of burrowing owl habitat infeasible. Standards that we suggest would be applicable to this situation would include whether an impact fee to fund acquisition, protection and management of land to mitigate for the impacts to burrowing owl habitat caused by that development would substantially exceed the level of other impact fees the City currently assesses development. Relative to off-site mitigation if, as suggested in the DEIR, the City wishes to make the argument that the option of purchasing habitat that is not adjacent to the impact area or even outside of the county is insufficient mitigation, then the City should introduce substantial biological evidence to support its decision.

Under CEQA, public agencies may not approve projects that result in significant impacts without first adopting feasible mitigation measures or alternatives that will substantially lessen or avoid such effects (PRC § 21002). Likewise, a public agency may not move to utilize 15093 without first considering and adopting all feasible measures to substantially lessen or avoid significant impacts. While purchase and protection of land elsewhere to benefit burrowing owls is not as desirable as local protection, it is clearly more advantageous to the species than no mitigation at all.

CDFG and the Service believe that MM BIO-15.4 through 15.6 are inadequate as written to mitigate potential impacts to burrowing owls and they may preclude development of a viable conservation strategy for the HCP/NCCP by developing burrowing owl habitat without providing for conservation and management of habitat for the species in perpetuity. CDFG and the Service request that these measures be re-evaluated in coordination with our agencies and revised measures that ensure adequate mitigation and do not preclude the development of a viable conservation strategy for the HCP/NCCP be developed and included in a recirculated DEIR.

Golden Eagle

According to page 282 of the DEIR, the City believes that the CVSP would have a significant impact on the golden eagle (*Aquila chrysaetos*) because the proposed project would result in the disturbance of nesting golden eagles. Although we agree that the impact to golden eagles would be significant, the City failed to accurately identify all of the adverse effects to the species. We agree that nesting eagles may be disturbed and add that the breeding season for golden eagles should be expanded to January –August (Polite and Pratt 1990). However, we disagree with the assessment on page 282 that "due to the lack of quality nesting habitat, however, the loss of foraging habitat would be less than significant" (City 2007). IMPACT BIO-16 should be revised so that the significance

determination is linked to both the loss of foraging habitat and disturbance of nesting. Golden eagles are year round residents in the project area and loss of foraging habitat that supports the species' prey base (i.e. jack rabbits, ground squirrels, insects, snakes, and birds) would have a significant impact.

Page 25 of Appendix G indicates that "Golden Eagles are known to be present in the vicinity of the Plan Area and have been observed foraging over the Development Area." We agree with Appendix G, which indicates that foraging habitat within the project area includes annual grassland, open canopied valley oak woodland, and agricultural communities within and adjacent to the project area. According to Table 4.6-25, proposed development could result in the loss of 2,624 acres of golden eagle foraging habitat (2,353 acres of agricultural fields, 40 acres of ruderal agricultural fields, 199 acres of non-native grassland, and 32 acres of valley oak woodland). The DEIR fails to address the impact associated with the loss of rodents, and a minimization of the golden eagle's prey base. Section 4.6.2, Existing Biological Resources, identifies several communities that are known to support rodents, including ground squirrels. Some of these communities include ruderal agricultural fields, non-native grassland, coastal sage-chaparral scrub, and coast live oak woodland. Although not identified in the DEIR as suitable habitat, we also believe that the fringes of active agricultural fields, despite frequent disturbance, may also support ground squirrels.

Furthermore, we cannot at this time concur with the assertion on page 55 of Appendix G that "if Golden Eagles nest within one-quarter mile of the Development area, disturbance to nesting eagles during the breeding season (typically February 1 to July 1) could occur." Please provide a citation for the one-quarter mile reference. We agree that breeding densities are directly correlated with foraging requirements; however, according to Smith and Murphy (1973), golden eagle territory size averages 124 square kilometers in northern California, but can vary largely as a result of habitat conditions. In the western United States, a golden eagle can have a home range of approximately 5,000 to 8,000 acres during the breeding season and resident pairs have been documented using ranges of 62,000 to 74,000 acres. Maximum ranges for winter migrants can be as large as 64,740,000 acres. These foraging areas will also be utilized by other birds.

Appendix G also concludes that the chance of a significant impact to foraging habitat is unlikely because there is an abundance of suitable nearby foraging habitat. This approach is a fairly common error in CEQA documents and should be substantiated or removed from this analysis. The conclusion assumes an unlikely condition, that the "suitable nearby foraging habitat" is not already being fully utilized and therefore has the capacity to support displaced animals. The conclusion is also based on the faulty assumption that surrounding habitat will retain its current baseline conditions (i.e. it assumes that the area will not be developed or adversely affected in the future).

This golden eagle impact analysis should be revised to include substantial evidence as defined under CEQA supporting the conclusion that impacts to foraging habitat are less than significant.. This evidence should include data on the total number of eagles utilizing the area (breeding and non-breeding), foraging behavior of individuals in the

CVSP area, number of nesting individuals and their relative foraging needs in the CVSP area. These data are necessary to conduct a valid analysis and to make an informed decision. Alternatively, the loss of foraging habitat could be considered a significant impact and adequate mitigation developed.

Nesting Special Status Avian Species

Page 282 of the DEIR contains the impacts analysis for nesting special status avian species and states the following:

> *White-tailed Kite, Northern Harrier, Loggerhead Shrike, Yellow Warbler, Saltmarsh Common Yellowthroat, California Thrasher, Cooper's Hawk, and California Horned Lark are all avian species that are known to occur within the CVSP Area. Permanent impacts to nesting habitat for these or other special status nesting avian species could occur during construction as a result of tree and shrub removal, ground disturbance, increased night-time lighting, and by direct mortality. However, due to the abundance of available nesting habitat in the surrounding area, this would not be a significant impact. Construction activities during the nesting season (typically March 1 to August 1) could lead to nest abandonment or poor reproductive success. This would be a significant impact* (City 2007).

The special status bird list should be considerably longer. We recommend that the lists of special status bird species (CDFG: http://www.dfg.ca.gov/bdb/pdfs/spanimals.pdf, USFWS: http://www.fws.gov/migratorybirds) be compared with known bird sightings from the CVSP area to update the list.

Furthermore, as recommended for golden eagle, the revised DEIR should accurately address impacts associated with loss of both nesting and foraging habitat. The assumption that surrounding habitat, not affected by the proposed CVSP, would be able to support the foraging and nesting needs of displaced birds is not biologically substantiated.

Other Breeding Birds

Page 283 of the DEIR contains the impacts analysis for other breeding birds and states the following:

> *There are several common migratory bird species known to occur within the CVSP Area, including but not limited to Red-tailed Hawk, Red-shouldered Hawk, and American Kestrel. These birds are protected by the Migratory Bird Treaty Act. While nesting habitat for these species is locally and regionally abundant, disruption of nesting avian species during the nesting season (typically March 1 to August 1) can lead to nest abandonment and poor reproductive success. This would be a significant impact* (City 2007).

Please reference http://www.fws.gov/migratorybirds/intrnltr/mbta/mbtandx.html, which provides a list of birds covered under the Migratory Bird Treaty Act (MBTA). Please note that the list includes the majority of bird species found in the United States from house finches (*Carpodacus mexicanus)* to California condors (*Gymnogyps californianus*). The statement that there are "several common migratory bird species known to occur within the CVSP area" is a substantial understatement. The Migratory Bird Treaty Act

(MBTA) (16 U.S.C. 703-712) implements four treaties that provide for international protection of migratory birds. The MBTA prohibits taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. Existing migratory bird permit regulations authorize take for specific types of activities, such as collecting birds for scientific or educational purposes, or lethal control of birds damaging agricultural crops. They do not authorize take resulting from activities such as forestry, agricultural operations, or otherwise legal operations that might reasonably be expected to take migratory birds, but is not the intended purpose of the action. Unlike the Federal Endangered Species Act, neither the MBTA nor its implementing regulations at 50 CFR Part 21, provide for permitting of incidental take of migratory birds. Bald eagles (*Haliaeetus leucocephalus*) and golden eagles are afforded additional legal protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d).

As recommended for golden eagle and nesting special status avian birds above, the revised DEIR should accurately address impacts associated with loss of both nesting and foraging habitat. The assumption that surrounding habitat, not affected by the proposed CVSP, would be able to support the foraging and nesting needs of displaced birds is not biologically substantiated.

San Francisco Dusky-Footed Woodrat

Page 283 of the DEIR text states the following:

> *The San Francisco dusky-footed woodrat is documented to occur in riparian areas along Coyote and Fisher Creeks and is common and widely distributed throughout the region. Therefore, the loss of some individuals as a result of habitat removal would have a negligible impact on populations of this species throughout the region and is a less than significant impact. Impacts to Coyote Creek would not occur with the implementation of the CVSP.*
>
> ***Impact BIO-19:*** *Impacts to San Francisco dusky-footed woodrat would be less than significant because this species is common throughout the CVSP Area and surrounding region. [Less than Significant]* (City 2007).

This analysis is problematic because it fails to recognize the status of this animal within its range. The San Francisco dusky-footed woodrat (*Neotoma fuscipes*) is coded as a G5T2T3S2S3 species in the CNDDB. This code indicates that the species is considered rare and at risk. While it is true to state that the sub-species appears common and widespread in its range, it is misleading to do so without also noting that the range is limited, and co-extant with, areas with the greatest development pressure in California. The reason that this animal is considered at risk has less to do with its current population size than it has to do with the threats to its existence. The primary threat to the species is dense development, similar to CVSP, over a significant portion of its range.

An attempt should also be made to provide data on the relationship of any woodrat concentrations to others found in the area. Once that is done, an impacts analysis can be completed and mitigation measures developed. Please note that CDFG is currently working to develop a mitigation protocol for this species.

Bat Species

For a project the size and scope of the CVSP, considerably more information should be provided on bat species. In addition to the possible loss of roost sites, the loss of foraging area could be significant as well. We recommend beginning with the species list noted at the end of this section and gathering data to determine which bats actually occur in the plan area, what parts of their life cycles are supported by habitats in the valley, what impacts might occur and how those impacts might be mitigated.

Pallid Bat and Yuma Myotis

The following mitigation measures is provided on page 302 of the DEIR:

> ***MM BIO-20.1:*** *Pre-construction surveys for potential bat roost habitat shall be completed in all trees, rock outcrops, and buildings subject to removal or demolition for evidence of bat use (guano accumulation, acoustic or visual detections). If evidence is found, then acoustic surveys shall be performed to determine whether a site is occupied. A minimum of three surveys shall be completed between April and November under appropriate weather and nightfall conditions using an acoustic detector. Exclusion of bats from occupied roosts shall be done in the fall prior to construction. A qualified wildlife biologist shall be present during exclusion* (City 2007).

While this measure minimizes direct mortality, it does not mitigate the loss of occupied bat habitat. This measure should be redrafted to include compensation for the loss of bat habitat. As we cautioned in our previous comments for avian species, it is inappropriate to automatically conclude that loss of roosting and foraging habitat would be less than significant because adequate habitat is located outside of the development area. Mitigation measures can vary considerably by species, but could include efforts to provide roosting and foraging habitats elsewhere. Once again, regional movements and habitat utilization is important in this evaluation.

In addition to our comments above, we noted several significant species omissions from the impact analysis contained in the DEIR. Least Bell's Vireo *(vireo bellii pusillus)* and Pacific Lamprey (*Lampetra tridentata*) are proposed for coverage under the developing HCP/NCCP. Subsequently, the City needs to demonstrate that the proposed CVSP will not preclude the conservation of the species. The DEIR should be revised to analyze both direct and indirect impacts as well as propose avoidance and mitigation measures as appropriate.

- Least Bell's Vireo: Least Bell's vireo is both State and federally listed as endangered. Appendix B of the Biological Resources Report (Appendix G of DEIR) indicates that there is a "high potential" for the species to occur. The species was observed along Coyote Creek, in the Coyote Creek Golf Course in June 2006
  (T. Rahmig pers. comm. with M. Thomas of the Service, November 16, 2006). Page 28 in Appendix G of the DEIR indicates that "suitable nesting habitat for the least Bell's vireo is present throughout the Coyote Creek floodplain and in areas along Fisher Creek where willows form dense riparian

thickets" (City 2007). Please provide an impacts analysis as well as avoidance and minimization measures for the least Bell's vireo to the revised DEIR.

- Pacific Lamprey: Pacific lamprey is not addressed in the DEIR or Appendix B of the Biological Resources Report. In general, the species is restricted to large streams within the County, including Coyote Creek (Jones & Stokes 2007). Please provide an impact analysis as well as avoidance and minimization measures for the Pacific lamprey to the revised DEIR.

CDFG and the Service are also concerned with the unexplained exclusion of a number of additional special status animal species that Appendix G acknowledges have a moderate potential to occur in the Project Area, including the American badger (*Taxidea taxus*), American bittern (*Botaurus lentiginosus)*, short–eared owl (*Asio flammeus)*, horned lark (*Eremophila alpestris)*, Bell's sage sparrow (*Amphispiza belli belli*), Lawrence's goldfinch (*Carduelis lawrencei*), and fringed myotis (*Myotis thysanodes*). The Service and CDFG request that these species identified above be added into the text of the DEIR and be fully evaluated for impacts and appropriate mitigation measures proposed. American badger is acknowledged in Appendix G as potentially being present, potentially being impacted and mitigation measures are proposed, yet it is not even mentioned in the DEIR. The DEIR should be revised to include this species and the analysis prepared for it. Please note that we do not agree that the mitigation measures proposed are appropriate or proportional to a possible impact. Using passive relocation for this species is likely to cause the badger to become a fatality on a nearby road. This section should be thought out in more depth and revised accordingly.

We also believe that a project with the size and scope of the CVSP, necessitates the analysis of impacts on a larger suite of bat species. We recommend the evaluation of potential impacts to the following bat species: California myotis (*Myotis californicus*), Mexican free-tailed bat (*Tadarida brasiliensis*), big brown bat (*Eptesicus fuscus*), hoary bat (*Lasiurus cinerus*) and western red bat (*Lasiurus blossevilii*). In addition to the possible loss of roost sites, the loss of foraging area could be significant as well. We recommend that supplemental information identify which bats occur in the Project Area, what parts of their life cycles are supported by habitats in the valley, what impacts might occur and how those impacts might be mitigated. CDFG and the Service recommend that impacts to all of the species referenced above be fully evaluated in the revised DEIR and appropriate mitigation measures proposed.

TERRESTRIAL WILDLIFE MOVEMENT CORRIDORS

In general, we agree with the first paragraph of terrestrial wildlife movement corridors on page 268 of the DEIR. We would however like to note that, although the size of the passage is critical to allow passage (re: the puma and culvert example), there are a number of other factors that limit or encourage movement. In addition it is important to remember that factors that encourage or limit animal and plant movement over time will vary considerably from species to species and community to community.

CDFG and the Service agree that Highway 101 constitutes a significant impediment to cross-valley movement. However, the discussion regarding the median separating north-bound and south-bound traffic should not be emphasized as much as it currently is in the DEIR. Although the median reduces the potential for animals to successfully cross Highway 101, the median is present in less than a third of the stretch of Highway 101 contained within the project footprint. The main connectivity issues posed by Highway 101 appear to be the distance to cross and the traffic volume. In addition, there is fencing on both sides of the freeway, although that to the east is relatively easy to cross.

The Monterey Road barrier discussion is also weighted too strongly. The gaps in the barrier that are mentioned are substantial, and the distance to be crossed is fairly minor. In addition small openings at the base of the barrier sections would allow passage of small animals.

CDFG and the Service disagree with the conclusions regarding culvert use under Highway 101. There are 25 known culverts passing completely under Highway 101 between Cochrane Road in Morgan Hill and Metcalf Road, south of San Jose. They range in diameter size from 18 inches to 72 inches and only three of these are less than 36 inches in diameter, a size known to be used by animals as large as raccoons (*Procyon lotor*), and skunks. The same culverts may also used by the American badger. Three of the culverts are 5 feet in diameter, which likely provide passage for wild pigs (*Sus scrofa*), bobcat (*Lynx rufus*) and coyote (*Canis latrans*) and 4 are 6 feet in diameter, a size which is known to be utilized by mountain lion (*Puma concolor*).

Beginning in March 2007, students from De Anza College, under the direction of Tanya Diamond from San Jose State University and Henry Coletto, Director of the California Deer Association, have been gathering data about wildlife passage along Highway 101 in the Coyote Valley corridor. Field work on animal use included transects along the western side of Highway 101, camera traps at select culverts and track plates. Preliminary transect data indicated the presence of high concentrations of opossums (*Didelphis virginiana*), raccoons, coyotes, deer (*Odocoileus hemionus*), bobcats, rabbits, woodrats, foxes and pigs. CRLF and western diamond-backed rattlesnake (*Crotalus atrox*) were also observed (one observation each).

The camera traps were even more productive as they were aimed at the culvert openings in an attempt to capture images of animals moving in and out of the culverts. The cameras were operated for different periods of time, so the results should be accepted as discrete, rather than comparable data. Camera trap results were as follows:

- **Culvert 7** - opposite Kirby Canyon landfill; 2 raccoons on the night of February 12, 2007.

- **Culvert 10** - approximately midway between Kirby Canyon and Coyote Creek Golf Course; 2 skunks, 2 raccoons, 2 coyotes, 3 bobcats and 1 mountain lion. The mountain lion entered the culvert from the east and was about to

exit on the west until frightened back, probably by the camera. Various times in February and March 2007.

- **Culvert 13** - near Coyote Creek Golf Course; 1 ground squirrel, 5 raccoons and 2 skunks in February 2007.

- **Culvert 23** - just south of the Bailey interchange; 1 bobcat, 1 deer (not observed entering culvert), 1 opossum, 1 raccoon, 1 skunk.

In addition to the above records, two unknown birds, one owl and one small, very fast mammal were observed to exit or enter culverts.

Animals can be expected to utilize passages where they encounter them in their normal courses of movement (Beier and Loe 1991). The DEIR contains very limited meaningful data to establish what natural movement patterns may exist in the area. The De Anza data, however, demonstrate that a wide range of animal species encounter culverts under Highway 101 and effectively utilize them to safely pass under the freeway. Although Highway 101 may pose a limited barrier to wildlife species, the data presented above provides substantial evidence that mammals (with the possible exception of deer and tule elk (*Cervus nannodes*) and birds, are known to successfully cross Highway 101.

Page 270 of the DEIR indicates that many of the culverts in the project area are built along a steep grade, but the DEIR does not define the term "steep grade." Due to their intended function, culverts are usually placed at minimal slopes to convey water and reduce the potential for erosion. We did not observe any culverts placed in particularly steep terrain during our field investigation. The revised DEIR should define "steep grade" relative to wildlife movement and describe how such gradients affect wildlife movement, if at all. The revised DEIR should also identify the location of these culverts if the City believes that slope of the surrounding terrain impedes wildlife movement.

The remaining species to be discussed, deer and elk, are known to utilize Coyote Creek, Coyote Creek Golf Course Road, the golf cart crossing at the Coyote Creek Golf Course, Bailey Avenue and Metcalf Road. The DEIR does not discuss the potential crossing opportunities at Bailey Avenue and Metcalf Road. However, CDFG and the Service consider these two crossings potential corridors for large mammals like deer and tule elk since the only impediments on Bailey Avenue and Metcalf Road are nighttime lighting and lack of cover, problems not likely to impede elk or deer. Furthermore, as mentioned in our January 3, 2007 letter, tule elk have been observed in the Bailey Road area, west of Monterey Highway, demonstrating that large mammals can in fact pass both Highway 101 and Monterey Highway.

Based in the information provided, we cannot at this time concur with the City's conclusion that the best passage opportunities in the project area are in the "Greenbelt" and Tulare Hill/Laguna Seca area. The "Greenbelt" is considered a good passage area because it contains the Coyote Creek crossing under Highway 101 as well as two crossings near the golf course, located at the north edge of the "Greenbelt." From there,

two crossings across Monterey Highway are open and the area to the west is characterized as fairly open. The DEIR, however, does not demonstrate that the Tulare Hill/Laguna Seca is one of the best passage opportunities in the project area. The DEIR fails to acknowledge the steep terrain and unique geographical features of Tulare Hill and how those features affect movement of specific wildlife species. Although the DEIR acknowledges that Coyote Creek currently serves as a movement corridor for some species, the DEIR does not analyze how current movement would be affected by increased human activity resulting from the CVSP. It is also reasonable to assume that any movement that may occur along the newly aligned Fisher Creek would also be affected by increased human activity.

More data are needed to analyze the impacts the CVSP would have on cross-valley movements and how best to minimize and mitigate those impacts. The data necessary to make scientifically-based landscape planning decisions is derived from long term studies that track plant and animal movement. This type of data is necessary to identify regional movement patterns, if any exist, as well as to determine where animals are attempting to cross under existing conditions, which will inform subsequent avoidance and mitigation efforts. For example, if tule elk were regularly utilizing the Coyote Creek crossing, focused surveys may document a lot of occurrences west of Highway 101. This type of data could support the hypothesis that the southern crossing opportunity through the "Greenbelt" may not be useful for tule elk.

The first step in landscape level planning, to ensure connectivity across the landscape, is identifying where animals are naturally moving. The next step is identifying existing barriers to plant and animal movements in the crossing area. The DEIR analyzes this in some detail although, as described above, we do not concur with all of the conclusions made by the City. Inherent in this evaluation is a set of assumptions about how animals will move through an area. The DEIR discussion appears to take the position that gaps in the various barriers need to be situated in a relatively linear fashion in order to facilitate successful passage. If our interpretation of the City's corridor analysis is accurate, the corridor analysis contained in the DEIR is intrinsically flawed, as most animals will negotiate non-linear paths. We believe there are a number of opportunities for plant and wildlife movement across the valley, including but not limited to: 1) culverts below Highway 101, 2) Coyote Creek crossing, 3) Coyote Creek Golf Course Drive, 4) golf course crossing and/or Bailey Avenue, 5) Monterey Highway near Metcalf Road, 6) gaps in existing barriers (i.e. along Highway 101 and Monterey Road) and/or 7) Fisher Creek. Based on the little data available, we believe that the natural tendency of many of the migrating animals would be to the north of Palm Avenue since development densities wane considerably north of Palm Avenue. The statement in the DEIR that the natural movement would be to the south, into the "Greenbelt" is contrary to what is known of animal movements and should be supported by substantial evidence or deleted. Furthermore, Figure 1.0-3 and Figure 4.6-1 seem to indicate that the vast majority of existing development in the project area is located within the "Greenbelt." Although the movement of generalist species and species known to adapt to human disturbance (i.e. raccoons, opossums, coyotes, etc.) may not be inhibited by existing development in the

"Greenbelt," the movement of species such as the bobcat, mountain lion, and tule elk may be hindered by existing development.

The Tulare/Laguna Seca crossing area is much more likely to be utilized for wildlife movement, but it is somewhat unclear what the actual route is that is being referred to. Since the analysis is appropriately dismissive of a crossing at Metcalf Road, the only alternatives would be to the south. As noted in the DEIR, the Metcalf Energy Center and retaining wall along Monterey Road further limit movement, which further restricts movement to the south. The most likely use of this area then, would originate from crossings to the south and from there northward to Laguna Seca and Tulare Hill. Based on the analysis in the DEIR then, the first possible location from the north to access this movement area would be the Fisher Creek culvert. The most likely origin of animals using this area would be Bailey Avenue and a number of culverts nearby. It is also very likely that animals are making their way up from further south, possibly from as far away as the Coyote Creek crossing.

To summarize, animals are moving in, around and through the CVSP area. For migration/relocation activities, the most likely pattern of movement across Coyote Valley, under the existing condition is through a number of openings across and under Highway 101 (3-5 can accommodate animals as large as male tule elk and deer; at least 8 can accommodate animals the size of a female elk and at least 12 can accommodate mammals as large as a badger). Movement could also occur along the Coyote Creek corridor, across Monterey Highway at one of five locations and then across the valley through the least densely developed area, north of Palm Avenue to Tulare Hill. The City's conclusion that animals are moving across the "Greenbelt" area, south of Palm Avenue, is not supported by the DEIR. Likewise, animals probably are moving across Tulare Hill/Laguna Seca, but the only way they can access those areas is from the south, through the proposed development area. Based on the data available, the most probable movement pathway is at Coyote Creek Golf Course and then northward to the Bailey Avenue area.

Please note that the first complete paragraph at the top of page 271 contains a number of factual errors that should be corrected in the revised DEIR. First, Tulare Hill has not been identified as a viable corridor by Tanya Diamond. Diamond developed a regional least-cost path analysis for badgers, but the data she collected does not account for the specific corridor issues around Metcalf Road. Diamond's work is invaluable, however, in predicting where efforts in enhancing badger movement opportunities should be directed. Second, although Henry Coletto observed tule elk in the vicinity of Bailey Avenue, he has not suggested that elk use the Tulare Hill area as a corridor. Finally, there are not numerous records of mountain lion kills at the Coyote Creek Golf Course underpass. To our knowledge, one lion was seen attempting to cross in that area and another was taken with a depredation permit.

REPTILE AND AMPHIBIAN MOVEMENT

Page 272 of the DEIR states the following:

> *Movement of reptile and amphibian species across most of the CVSP Area is restricted by the limited availability of suitable habitat, lack of cover, and presence of roads. Aquatic habitat known to support CTS is present on both sides of the CVSP Area, and CRLF is known to occur in the Ogier Ponds in the Greenbelt. These occupied habitat areas are approximately two miles apart, which is the furthest dispersal distance known to be traveled by CTS, and further than the dispersal distance traveled by CRLF (USFWS, 2005, 2006b). The land between these occupied habitats consists of plowed agricultural fields, developed land, highways, and other roadways. These land uses and barriers are not very compatible with the successful movement of most reptile and amphibian species* (City 2007).

While CDFG and the Service generally agree that movement across Coyote Valley is very difficult for CTS and CRLF, the level of detail provided in the discussion is not sufficient to dismiss the potential for dispersal across the valley completely. Caution should always be exercised when referencing known upward limits of animal movements to support an argument because the range limit is set by a relatively small set of tracked individuals in an entire population. A more accurate way to describe movement is in terms of the probability of moving distances beyond the known dispersal range and by predictions of numbers of individuals. While the movement distances cited above are accurate, this data should not be used to support the assumption that movement could not occur past the upper range of known movement distances. For example, Bulger, *et. al.* (2003) found that one CRLF moved 2.23 miles over 35 days to move between two ponds that were 1.7 miles apart. Fellers (2005) stated that some individual CRLF moved 1.2-1.9 miles.

It is also difficult to provide confident conclusions regarding the potential use of habitat types generally viewed as less useful, such as plowed lands and developed areas. Animals can be quite adaptable when survival is at stake and this appears to be particularly true of CTS. As indicated earlier, the 2005 Designation of Critical Habitat for the California Tiger Salamander, Central Population" states that, "examples of barriers are areas of steep topography devoid of soil or vegetation. Agricultural lands such as row crops, orchards, vineyards, and pastures do not constitute barriers to the dispersal of CTS" (Service). As such, the significance of the impact should not be limited to "undisturbed" areas, as agricultural fields are not considered barriers to dispersal. In a CTS tracking study in Sonoma County, CTS were collected in plots located in disked fields (LSA Associates 2004). At Stanford University, CTS are found in retaining walls and, in one case, in an unused cistern in the front yard of a residence in an urbanized portion of Menlo Park. The cistern was located more than a mile from Lake Lagunita. To reach this site,the 8 individuals likely traveled over a mile, traversing developed areas with buildings, a golf course, a heavily traveled road and medium density residential development (Launer, pers. comm.).

When combined with these data and observations, the most likely conclusion is that movement by multi-generational amphibian species across Coyote Valley is very difficult but is still possible. This is particularly true given the significant amount of land that could not be accessed by the City's environmental consultants, which could contain refugia for moving amphibians or other multigenerational species. It is also critical to reach accurate conclusions regarding CTS movement in the project area since

minimization and mitigation measures need to account for the animal's dispersal and movement in the Project Area.

MOVEMENT OF FLYING SPECIES

This section should be supplemented with a discussion that addresses why only the listed habitat types were chosen. All habitat types in the valley could currently act as stepping stones, they do not need to be "high value" habitat, as indicated on page 272. As noted on page 273, "flying wildlife species are, however, affected by large areas of developed land that occur in the absence of stepping stone dispersal areas, and can be affected by heavy traffic use" (City 2007). Therefore, the key concept that this section should address is that cross valley movement is currently relatively unimpeded for flying species, but it will get more difficult if the CVSP is implemented. The DEIR should discuss this in more depth and attempt to determine how much degradation would occur and how to best mitigate for it.

IMPACTS TO WILDLIFE MOVEMENT

The text of the DEIR states:

Despite the existence of several major barriers to the movement of terrestrial wildlife species in the CVSP Area, there is evidence that some movement may occur across the Tulare Hill area. Additional terrestrial wildlife movement may also occur in non-native grassland and agricultural fields in the Greenbelt. No major urban development is proposed by the CVSP in these areas. Movement along the Coyote Creek corridor would not be affected because Coyote Creek would be avoided with the exception of the construction of the two bridges. The Tulare Hill corridor would also remain largely undeveloped, containing the Laguna Seca Flood Storage Basin, restored Fisher Creek corridor, and potentially, the construction of ballfields. The restored Fisher Creek corridor would provide additional functions for wildlife movement within the CVSP Area due to the planned increase in riparian corridor width. In addition, no construction would occur within 100 feet of the top of bank of either creek, except for the two bridges crossing Coyote Creek. The preservation of the Greenbelt as part of the CVSP would be beneficial to the preservation of wildlife movement corridors. Although a small amount of occasional inter-valley movement in the central portions of the CVSP Area may be affected, existing corridors in the Greenbelt and Tulare Hill areas would not be developed. Implementation of the CVSP would, however, result in increased traffic along Monterey Road and Santa Teresa Boulevard, particularly at night, which could reduce the viability of the wildlife movement corridors available in the CVSP Area. In addition, the presence of domestic animals and increased night lighting in the CVSP Development Area may affect the use of these wildlife corridors. These would be significant impacts to potential existing wildlife migration corridors.

Impact BIO-26:** The proposed project could result in significant impacts to existing land traversing wildlife migration corridors. **[Significant Impact]

For the reasons described above, CDFG and the Service disagree with this analysis and conclusion of impacts to wildlife movement described in Section 4.6.3.6 on pages 284

and 285 of the DEIR. Although we agree that the proposed project would have significant impact on wildlife corridors, the City fails to properly identify the cause of the significant impact, which relates to corridor function. Instead, the City links the significance of the adverse effect to increased traffic, night lighting, and the presence of domesticated animals. Although all of these factors do contribute to the project resulting in a significant impact to wildlife movement, they are secondary relative to reduced corridor function. The development of the CVSP would likely exacerbate already restricted cross valley movement. Although the majority of the culvert crossings along Highway 101, depicted on Figure 4.6-18 would not be developed, their function as corridors would diminish as a result of being day lighted into developed areas. Developing the North Coyote Campus Industrial Area and the Coyote Valley Urban Reserve would, for the most part, result in corridor "dead ends." We also point out that although Coyote Creek itself will not be disturbed, with the exception of the two bridges, a substantial amount of development will infringe on the existing riparian corridor and will likely adversely affect movement relative to the existing condition. This issue is intrinsically related to the issues raised previously regarding the lack of site-specific analysis conducted to determine adequate riparian setback(s) along Coyote Creek.

We especially disagree with the statement on page 285 that indicates "the preservation of the "Greenbelt" would be beneficial to the preservation of wildlife movement corridors" (City 2007). The preservation of the "Greenbelt" would not likely adequately offset adverse effects to existing corridors since page 94 of the DEIR indicates "in general, the Greenbelt Area is more developed than the CVSP Development Area" (City 2007). If by chance, the "Greenbelt" was a crucial linkage across the valley, the City does not describe the mechanisms that would be implemented to protect and manage the "Greenbelt" in perpetuity for the primary purpose of preserving biological resources. Therefore, nothing would preclude future actions in the "Greenbelt" from adversely affecting any movement of plants and wildlife that may be occurring under current conditions. In fact, under the CVSP, some development is proposed in the "Greenbelt." The City proposes to construct groundwater recharge basins in unidentified areas of the "Greenbelt." The DEIR indicates that the hydrological characteristics and the locations of the basins have not yet been determined, but identifies it as a significant impact on page 277 due to the potential introduction of non-native species into wetland, stream, and/or pond habitats.

We also disagree with the conclusion on page 285 that only "...a small amount of occasional inter-valley movement in the central portions of the CVSP Area..." occurs (City 2007). As previously discussed, this assertion is not supported by existing body of scientific data regarding animal movements in the project area.

MITIGATION FOR IMPACTS TO WILDLIFE MOVEMENT

Section 4.6.4.5 attempts to address mitigation for impacts to wildlife movement. Page 305 of the DEIR states the following:

> *Impacts to the Coyote Creek wildlife corridor during the construction of the two bridges over the creek and impacts to existing land traversing wildlife migration corridors (Impacts BIO-9 and*

> *BIO- 25) would be mitigated to a less than significant level with the implementation of MM BIO-3.1, BIO-5.1, BIO-6.1 through -6.3, BIO-9.1, BIO-11.1, BIO-11.2, BIO-12.1, BIO-12.2, BIO 15.1-15.6, BIO-16.1, BIO-17.1, BIO-18.1, BIO-20.1, BIO-21.1, BIO-22.1 through -22.4, BIO-24.1 through -24.13,as well as the mitigation measure described below* (City 2007).

The project description contained in the DEIR does not describe the anticipated duration of bridge construction (i.e. # of seasons) and does not indicate if both bridges will be constructed simultaneously. As such, it is impossible to determine if the proposed mitigation measures would adequately offset impacts to a less than significant level along Coyote Creek. We also recommend that the City review the long list of mitigation measures referenced above for applicability to the impact being analyzed. Of the 37 presented, only 3 appear to mitigate corridor impacts (BIO 22.1-22.4) and those consist only of planting trees; 13 are only of value if the mitigation takes place in the valley itself and there is no requirement that they will; 2 are of low benefit and 19 are of no benefit at all. Instead of listing mitigation measures intended to minimize the effects of other impacts, the City should develop mitigation measures specific to corridor impacts. This same problem is found in the mitigation measure sections associated with CTS, western pond turtle and burrowing owl.

> ***MM BIO-26.1:*** *The project shall include appropriate measures to facilitate wildlife movement through the CVSP Area. The design of new roads, overpasses, fences, and other linear facilities should, where possible, remove existing obstacles to wildlife movement and incorporate design elements to promote, where possible, wildlife movement through the Tulare Hill area and the Greenbelt. Such improvements or modifications can include enlargement of culverts beneath roadways provision of areas for wildlife movement on overpasses, reduction in night time lighting near potential wildlife corridors, removal of barriers such as walls and fences near critical crossing areas, maintenance of naturally vegetated areas within protected open space areas to provide cover for various species, and other measures that eliminate barriers to movement in these two areas. The project shall include a minimum 100-foot buffer on either side of Coyote Creek and Fisher Creek that will be maintained with natural vegetation to promote movement of wildlife along these creek corridors and prevent potential interference of wildlife movement by domestic animals* (City 2007).

The primary problem with this MM BIO-26.1 is that is does not qualify as a valid mitigation measure under CEQA. As noted previously, CEQA requires that a Lead Agency adopt a mitigation measure or measures for each impact determined to be significant (Guidelines (15126.4(a)). The measure(s) should be to avoid, minimize, rectify, reduce or eliminate the impact over time or compensate for the impact (Guidelines Section 15370). Mitigation measures should not be deferred to a future time but may be described as performance standards that might be implemented in one of a number of ways (Guidelines 15126.4(a)B). Mitigation measures should be enforceable (Guidelines 15126.4(a)2) and related to a legitimate government interest as well as being roughly proportional to the impact(s) (Guidelines 15126.4(a)4).

Furthermore, mitigation measures should be specific, feasible actions that will actually improve adverse environmental conditions and should be measurable to facilitate monitoring (Bass *et. at.* 1999). Mitigation measures should clearly identify what they are intended to accomplish, how they will be done, who will be responsible for implementing

them, what standards will be met and what fall back measures will be in place if the mitigation measures fail. This mitigation measure fails to meet these standards.

In summary, CDFG and the Service believe the analysis of impacts and mitigation measures proposed to address wildlife movement are inadequate and do not mitigate the impacts to a less than significant level. Again, we strongly recommend the City collect site-specific data, consult with all of the applicable Resource Agencies and independent experts and identify the existing condition of animal and plant connectivity in the project area. Only after this occurs can an adequate impacts analysis be conducted. Legitimate mitigation measures that will offset the adverse effects must be developed based on an evaluation of a range of project design and development alternatives to avoid, minimize and mitigate impacts to wildlife regional connectivity.

BAILEY-OVER-THE-HILL ALIGNMENT

We are extremely concerned with the ambiguity surrounding the Bailey-Over-the-Hill (BOH) component of the proposed project. Page 289 of the DEIR acknowledges that the BOH could result in the "significant loss of sensitive biological habitats and presumably ordinance-size trees in the alignment area" (City 2007). The DEIR also acknowledges that Santa Clara dudleya, bay checkerspot, CTS, and designated critical habitat for bay checkerspot and CTS could be affected by the BOH alignment alternatives. However, since the DEIR does not identify a selected road alignment alternative, it fails to adequately assess impacts to vegetative communities and special status plant and animal species.

We also note that the discussion of special status plant and animal species in the BOH alignment on page 273 should be revised to indicate that a small portion of the BOH alignment area along McKean Road may be located within designated critical habitat for CTS. The DEIR currently indicates that the "the USFWS has proposed a critical habitat area for CTS" in a portion of the BOH alignment (City 2007). Please reference the August 23, 2005 Federal Register, Designation of Critical Habitat for the California Tiger Salamander, Central Population. The BOH alignment may affect the East Bay Region Unit 8 (Laurel Hill Unit).

We are also concerned that the City failed to analyze impacts to the large suite of sensitive plant and animal species identified, on pages 61 and 62 of Appendix G, as having the potential to be significantly impacted by the BOH alignment. Many of the species omitted from analysis in the DEIR are proposed for coverage under the developing HCP/NCCP, these include big scale balsamroot, Mt. Hamilton thistle, fragrant fritillary, Loma Prieta hoita (*Hoita strobilina*), smooth lessingia, Hall's bush mallow (*Malacothamnus hallii*), Metcalf Canyon jewelflower, most beautiful jewelflower, CRLF, CTS, western pond turtle, western burrowing owl, least Bell's vireo, bay checkerspot butterfly, golden eagle, tricolored blackbird, and FYLF.

As previously discussed, we disagree with the City's general approach to defer data collection to a period following the CEQA review and comment period, as proposed

under MM BIO-31.1, MM BIO-32.1, and MM BIO-33.1. Furthermore, we cannot at this time concur with the adequacy of MM BIO-31.1 and MM BIO-31.2, which propose that adverse effects associated with the BOH would be offset by previously proposed mitigation measures for vegetative communities and ordinance-size trees since the DEIR fails to identify the BOH alignment's impacts to these resources. Similarly, we cannot at this time concur with the adequacy of MM BIO-33.2 on page 307 of the DEIR, which states that adverse effects to CTS and bay checkerspot butterflies would be offset through "off-site habitat conservation, either through a conservation bank and/or easement at a 3:1 ratio of like-habitat for every acre of critical habitat impacted" (City 2007). An impacts analysis would need to be conducted to enable CDFG and the Service to determine the adequacy of this mitigation measure. Furthermore, we disagree with the statement that "if critical habitat areas designated by USFWS do not contain suitable habitat for species, no mitigation is necessary" (City 2007). As previously discussed in our comments for impacts to bay checkerspot, and as applicable to CTS critical habitat, we would consider impacts significant if the project adversely affects any of the Primary Constituent Elements defined in the final critical habitat designations for these species. As such, the Service may still determine that the BOH would result in a significant impact to critical habitat, in the event that the City determines that "suitable habitat for the species" is not present if the Service concludes that one or more PCE is adversely affected.

The BOH is necessitated by the CVSP. As such, we view the BOH as an integral part of the CVSP. We do not believe it would be appropriate to prepare a supplemental CEQA document once details for the BOH are available because the impacts associated with the BOH are interrelated with the larger CVSP and would thus need to be analyzed with the CVSP as a single and complete project. The DEIR should be revised to describe the selected alternative for the BOH alignment. Similar to the rest of the project components, a proposed alternative for the BOH needs to be identified and analyzed in detail in the revised DEIR. In addition, the project boundary should be revised in all of the maps in the DEIR to include the proposed BOH alignment (i.e. Figure 2.0-5). The City should not re-circulate its revised DEIR until the BOH alignment and associated impacts and mitigation measures are refined.

4.8 Hydrology and Water Quality

Page 331 indicates that "areas within the CVSP Area are located within the 100-year floodplains of both Coyote and Fisher Creeks" (City 2007). CDFG and the Service strongly recommend that the City refrain from developing within the 100-year floodplains. Development within floodplains risks public safety, infrastructure, water quality, stream channel /floodplain function, and riparian function.

4.10 Visual and Aesthetics

Section 4.10.2.5, New Source of Light or Glare, indicates that the establishment of a new city in an essentially unlit area will result in a significant, unmitigable impact (AES-4). We agree that new development would create a new source of substantial light in the

Coyote Valley area. However, the City can and should mitigate the impact of new lighting. For example, the existing urbanized area of San Jose affords countless opportunities to retrofit existing light sources in an effort to decrease overall illumination in the area. This is very clearly a feasible mitigation measure under CEQA and should be considered by the City. As noted previously, under CEQA, public agencies may not approve projects that result in significant impacts without first adopting feasible mitigation measures or alternatives that would substantially lessen or avoid such effects. Likewise, a public agency may not implement CEQA Guidelines Section 15093 without first considering and adopting all feasible measures to substantially lessen or avoid significant impacts.

The DEIR should also be revised to include an analysis of potential lighting impacts on plants, animals and natural communities. There is a fairly extensive, and growing, body of research on the effects of artificial light on biological resources (Rich and Longcore 2006; Buchanan 1993, 2006; Rydell 2006). Although the DEIR acknowledges the potential effects of increased lighting on CTS, CRLF, FYLF, western pond turtle, birds and bats, it does not analyze those effects nor does it propose meaningful mitigation measures. The only mitigation measure offered by the City to address this issue is that lighting sources would be designed to comply with a standard adopted more than two decades ago for non-biological reasons.

4.16 Water Supply Impacts

Page 425 of the DEIR states:

> *The biological impacts of constructing an ARWTP[Advanced Recycled Water Treatment Facility] at the WPCP [San Jose/Santa Clara Water Pollution Control Plant] and/or within the CVSP Area would be minimal because the facilities would not be located on sites with sensitive biological resources. While there is Burrowing Owl habitat within the boundaries of the WPCP, the modular plant would not be placed in proximity to these habitat areas. Similarly, as shown on Figures 4.6-1 through 4.6-3, sensitive biological habitats containing special status plant and animal species are not located in proximity to the MEC. The facility in CVSP would be placed in such a way as to avoid existing wildlife migration corridors. There are very few trees located on the WPCP property* (City 2007).

CDFG and the Service do not agree with the conclusions made this section. First, there is no evidence submitted to support the statement that an ARWTP could be placed where it would have minimal effects to sensitive biological resources. At least one member of the Resource Agency team visited the WPCP and questions whether impacts to burrowing owl could be completely avoided. The WPCP site contains significant wetland areas in addition to burrowing owl habitat. The DEIR should be revised to clearly identify how impacts to special status plants and animals will be avoided. Likewise, the City should demonstrate how the construction of an ARWTP would be constructed in the Coyote Valley without adversely affecting wildlife linkages. The DEIR concludes that one of the two potential movement corridors in the valley is located in the Tulare Hill area; the MEC is adjacent to Tulare Hill. The statement that a water treatment facility could be placed in this area without affecting wildlife corridors seems to contradict the entire analysis in the wildlife corridor section contained in the DEIR.

Section 5.0 Alternatives

Section 5.6.19 on page 458 states the following:

> *The other objectives of the CVSP project could be met; however, most of the objectives are related to implementing the CVSP in the Coyote Valley. For example, constructing the project in North San José could include 20% affordable housing; however, the protection of the Greenbelt area as a nonurban buffer between the cities of San José and Morgan Hill would probably not occur under the NSJDPU Alternative Location, because there is no nexus between the two actions* (City 2007).

We have two comments relative to this statement: First, please define what "protection" would occur in the "Greenbelt" area. The DEIR does not explicitly describe the primary function and management of the "Greenbelt." Second, there does not seem to be anything precluding the City from adopting policies that may adversely affect existing biological resources in the "Greenbelt" and the mitigation efforts that are vaguely proposed to occur there.

Section 6.0 Cumulative Impacts

CUMULATIVE BIOLOGICAL RESOURCES IMPACTS

Analyzing cumulative effects is often challenging due to the difficulty in defining temporal and spatial limits. If defined too broadly, the analysis can become unwieldy, but if defined to narrowly, a number of significant issues could be overlooked. An appropriate cumulative impacts analysis is particularly crucial for a project with the magnitude of the CVSP. We believe that Section 6.0 of the DEIR could benefit from substantial revision. It currently lacks the level of information and analysis necessary to meet the requirements of CEQA.

The following text, extracted from Section 6.3.6.1 on page 491, describes the projects selected for the cumulative effects analysis:

> *Approval and implementation of the cumulative projects listed in Table 6.0-1 would directly affect development on over 4,700 acres of land of the City of San José. The cumulative project sites are shown on Figures 6.0-1-3. Of the overall cumulative development area, approximately 3,850 acres are currently undeveloped; that is, they are either in agricultural production, fallow, vacant lots, or are in a natural state and provide a higher level of biological habitat than urbanized property. Currently, of the 3,850 undeveloped acres, approximately 114 acres are a golf course, 222 are nonurban hillside, and 3,500 are the CVSP Development Area* (City 2007).

The projects referred to in the excerpt above appear to be entirely contained within the City of San Jose. The only other project considered in the cumulative effects analysis is the HCP/NCCP. We recommend that the City utilize the following NEPA definition and CEQA Guidelines when revising the cumulative effects analysis in the DEIR

(a) The Council on Environmental Quality's regulations (40 CFR §1500 - 1508) implementing the procedural provisions of National Environmental Policy Act (NEPA)

of 1969, as amended (42 U.S.C. §4321 et seq.), define cumulative effects as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR §1508.7)."

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:

(1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

(2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

(3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

We do not believe the list of projects considered in the cumulative impacts analysis captures all of past, present, and probable future projects, as required by CEQA. Due to the size of the proposed CVSP, the list of projects that should reasonably be considered in the cumulative effects analysis will vary for each impact analyzed. The incomplete list of related projects presented in the DEIR artificially minimized the cumulative effects analysis in relation to CVSP. Notable omissions from the list of projects presented in Table 6.0-1 include, but are not limited to, the Castro Valley Ranch Subdivision Project

in Gilroy, the Soda Lake Project in Santa Cruz, the large residential commercial development in northern San Benito, United Technologies Corporation Site Closure Program in San Jose, Coyote Creek Parkway County Park Integrated Natural Resources Management and Master Plan in San Jose, and a potential Quarry Operation at Sergeant Ranch in Gilroy.

Furthermore, the DEIR does not adequately address cumulative nitrogen deposition impacts on serpentine grasslands and the special status species they support since the City omitted the Metcalf Energy Center, Los Esteros Power Plant, and Donald Von Raesfeld Power Plants from its cumulative projects list. The City also failed to consider existing non-point sources such as vehicular emissions from surrounding surface streets and highways. Although ambient nitrogen deposition already exceed the threshold of effect, any additional of atmospheric nitrogen to an already stressed ecosystem is significant.

Sensitive Plant and Animal Species

Due to issues previously raised, CDFG and the Service cannot at this time concur with the City's conclusion that "cumulative projects would not result in significant impacts to special status plant and animal species, and the proposed CVSP project would not contribute towards a significant cumulative impact" as stated in Impact C-BIO-1 on page 492 (City 2007). In fact, based on what we know about projects omitted from the cumulative effects analysis, we believe it is highly probable that the project as proposed would result in significant cumulative impacts to special status plants and animals.

Burrowing Owl Habitat

Even with the incomplete list of related projects contained in the cumulative effect's analysis, Section 6.3.6.7 of the DEIR identifies the cumulative loss of up to 1,246 acres of burrowing owl habitat. The DEIR acknowledges that this impact could be mitigated through the establishment of a local mitigation bank. However, the City concludes that since no such bank exists, the impacts to burrowing owl habitat are significant and unavoidable.

CEQA Guidelines Section 15130(b)5 state in part, that "an EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects." Furthermore, CEQA Guidelines 15130(c) state that, "with some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis."

As noted previously, a Lead Agency is required to make findings based on substantial evidence that mitigation of impacts is unfeasible. Additionally, a Lead Agency is required to mitigate to the maximum amount feasible before adopting Findings of Overriding Consideration. Since the DEIR identifies the establishment of a burrowing owl mitigation bank as a feasible mitigation measure to offset cumulative impacts to burrowing owl habitat, there does not appear to be any reason the City should not

establish such a bank. In fact, the City of San Jose recently worked on developing a draft burrowing owl plan and identified a substantial amount of potential mitigation area within the City limits. The work completed thus far demonstrates the feasibility for the City to meet mitigation standards for burrowing owl impacts.

Wetlands and Riparian Habitat

Section 6.3.6.4 describes cumulative impacts to wetlands and riparian habitat. Page 494 of the DEIR states the following:

> *It is generally desirable, therefore, to minimize human activities adjacent to riparian habitats. This need to reduce human use has led to the development of the setback or buffer concept along riparian areas as an attempt to reduce impacts to riparian areas. While empirical evidence exists to support the concept that wildlife values of the riparian corridor can be compromised by adjacent human activity, little empirical data presently exists for the establishment of a precise setback area* (City 2007*).*

We disagree with the concluding sentence above. A growing body of research has been developed regarding riparian setbacks (i.e. See Wenger 1999). In addition, the City should have considered the 100-year floodplain when determining appropriate riparian buffers for the CVSP. Please reference Luisa Valiela's, EPA, electronic message dated May 3, 2007, addressed to the CVSP interagency group. The EPA's "National Management Measures to Control Nonpoint Source Pollution from Urban Areas," dated November 2005, indicates that riparian buffers usually range from 20 to 200 feet wide and should include the 100-year floodplain. A buffer at least 100 feet wide is typically recommended for water quality protection, and a 300-foot buffer is recommended to maintain a wildlife habitat corridor. Moreover, EPA guidance indicates that riparian areas, including adjacent wetlands, steep slopes or critical habitat areas should also be considered when determining appropriate buffers (Valiela pers. comm. May 3, 2007).

Although empirical research as well as regulatory guidance regarding riparian buffers is abundant, the challenge arises when agencies are required to first accurately evaluate the existing conditions and functions of specific watercourses; second, correctly identify all of the threats to the existing condition; third, accurately identify stream-specific setbacks based on the best available scientific data; and finally consistently implement and enforce stream-specific (sometimes stream reach-specific measures) to protect watercourse and riparian function. Page 494 goes on to state the following:

> *Nevertheless, riparian setbacks of up to 100 feet are often recommended by CDFG as appropriate for streams with high quality riparian habitat. These setbacks are typically measured from either the top of the bank or the outer edge of riparian vegetation, whichever is greater. In addition, the City's Riparian Corridor Policy Study indicates that "development adjacent to riparian habitats should be set back 100 feet from the outside edge of the riparian habitat (or top of bank), whichever is greater.*
>
> *Many of the cumulative projects include large setback buffers that will avoid and/or reduce impacts to riparian habitat and the wildlife that uses such habitat. The North San José Development Policies Project EIR assumes that future development will observe riparian setbacks of at least 100 feet along the Guadalupe River and Coyote Creek, within which minimal human use and disturbance will be allowed. Any development proposal that encroaches within the 100-*

> *foot riparian setback will require additional CEQA review. All EEHVS development will observe a 100-foot riparian setback from Evergreen Creek and a 50-foot setback from Fowler Creek. The reach of Fowler Creek that crosses the Berg/IDS property is devoid of riparian habitat and the 50-foot setback is considered sufficient to avoid impacts. Similarly, development of the CVSP would be required to observe a 100-foot riparian setback from Coyote Creek and relocated and restored Fisher Creek* (City 2007).

As described in our January 3, 2007 letter, use of blanket standards to establish setbacks for biological resources should be approached with caution. Although CDFG sometimes recommends a 100-foot riparian buffer, the recommendation is a reflection of agency resource and staff limitations. The agency does not have the resources to enable staff to evaluate each project and associated stream condition. The 100-foot buffer recommendation is not the result of exhaustive research. Similarly, although EPA developed measures to control nonpoint source pollution in watercourses, project proponents should continuously be aware of the fact that existing guidelines should not be misused as universal policy. Again, we emphasize the need to develop riparian setbacks based on site-specific conditions.

As indicated earlier, CEQA requires substantial evidence based on analysis of the actual baseline conditions and the potential impacts from the proposed project. Substitution of an existing 100-foot riparian buffer policy in lieu of a project-specific analysis based on substantial evidence is inappropriate, especially for a project with the magnitude of CVSP. Although the implementation of a standard riparian setback provides assurances to project proponents and streamlines the permitting process, its automatic incorporation into a CEQA analysis is not appropriate and instead should be verified by and/or replaced with a project-specific analysis.

As noted in our January 3, 2007 letter, there are many benefits associated with riparian corridors and associated buffers. These can include providing habitat for terrestrial and aquatic organisms, providing conveyance and storage of flood waters; filtering/controlling sediment input to streams; stabilizing streambanks; controlling channel erosion and drift; filtering contaminants such as nitrogen, phosphorus, pesticides, petrochemical compounds and metals; providing woody debris and leaf litter; regulating temperature and light; improving the aesthetic conditions; and providing recreational and educational opportunities. Appropriate setbacks can vary considerably and are in large part dependent on the local plant communities and the species that are dependent upon them, the hydrologic condition that defines the physical structure of the stream and riparian communities, the geographic location, climate, soil type, and topography. This complex matrix of factors often results in seemingly contradictory riparian setback standards. The same complex matrix of factors therefore necessitates project-specific analysis for projects like the CVSP, rather than relying on pre-existing riparian policies that may or may not be appropriate for a specific situation. While the DEIR takes the position that the 100-foot setback will adequately mitigate potential impacts, no substantial evidence is presented to support this assertion. On the contrary, we believe that it is reasonable to assume that any minimization of the existing riparian corridor may result in significant impacts. These impacts could occur as a result of changes in microclimate, shading/lighting, runoff patterns, concentration of pollutants, etc. For the

reasons described above, we disagree that cumulative projects that conform to the City's 100-foot riparian corridor policy would result in a less than significant impact to riparian habitat. We recommend the City revise its analysis in both the cumulative impacts and biological sections of the DEIR to fully analyze the potential effects of CVSP on the Coyote Creek riparian corridor.

Trees

Page 497 of the DEIR states the following:

> *While replacement planting would be included in the future development and redevelopment projects to reduce the long-term effects of habitat loss from tree removal, the loss of mature trees, particularly native trees, resulting from development of all of the cumulative projects would result in a cumulatively significant biological impact for which there is no effective mitigation in the short term (City 2007).*

Again, CEQA requires mitigation to the extent feasible before adopting Findings of Overriding Consideration and specifically indicates that some cumulative impacts may only be mitigable through imposition of an ordinance. The City fails to offer mitigation for what it identifies as a significant cumulative impact to mature trees, many of which are native. If the impact is linked solely to the loss of mature trees, the City could reasonably offset the adverse impacts by the planting native trees throughout the City, prior to tree removal under the CVSP. We emphasize the importance of planting native trees prior to impact to minimize temporal losses to the vegetative community and the species that depend on them.

Active Raptor Nests and Occupied Owl Burrows During Project Construction

The following mitigation measure is proposed on page 497:

> *In conformance with federal and state regulations regarding protection of raptors, appropriate surveys for Burrowing Owls following CDFG protocols will be completed prior to any development occurring on sites with foraging or nesting habitat for Burrowing Owls, or prior to redevelopment occurring on sites identified as having potential burrowing owl habitat. Likewise, construction surveys for nesting raptors will be conducted on proposed development or redevelopment sites with mature trees.*
>
> *If surveys confirm that a site is occupied habitat, or that a nest exists that could be disturbed by proposed development, then additional mitigation measures to minimize or avoid impacts to the individual raptors, their occupied burrows or nests, would be identified and implemented. Implementation of pre-construction surveys and establishment of construction-free buffers, in the event raptors or active owl nests are present, will avoid project impacts and avoid a significant cumulative impact to raptors* (City 2007).

There are a number of problems with this mitigation measure. First, the measure does not address non-raptor bird species nor does it address bat species that would suffer similar project-related effects as raptors and burrowing owls. As noted earlier in the DEIR, migratory birds are protected under the MBTA. Since the City acknowledges that raptors and their nests would be significantly impacted by the proposed project, it seems reasonable to assume that other birds and bat species would also be adversely affected by

loss of nesting/roosting habitat and loss of foraging habitat. We believe that once this much larger suite of bird and bat species is appropriately analyzed in the cumulative impacts section, the DEIR may come to the conclusion that this would result in a significant effect. We recommend that this section be significantly revised to include migratory birds and bat species.

The measure appears to be based on a standard construction avoidance measure that is intended to delay removal of nests until young have fledged. Raptors as a whole tend to have high nest fidelity. In addition, nesting opportunities are becoming increasingly rare with the spread of development. Therefore, the DEIR's avoidance measures should not only avoid direct take of birds, but it should also incorporate the preservation of breeding areas (i.e. nest trees) to, at a minimum, maintain breeding success. The nests of other bird species and bat roosts should also be included in a revised mitigation measure. The City could adopt policies that require creation, protection and enhancement of nesting opportunities in the region, to ensure bird and bat populations reach, and remain at, self sustaining levels. This measure would inherently be linked to minimization and mitigation measures the City should propose to replace mature trees that would be removed to accommodate development. Page 496 of the DEIR indicates that "raptors are known to nest in mature trees and sometimes on buildings. Mature trees are present on developed and vacant properties on the cumulative project sites" (City 2007). Again, we emphasize the importance to replace all removed trees with native trees, prior to impact.

Conclusion

The CEQA statue is codified in Section 13 of the California Public Resources Code. Section 21001 of that Code states:

> *The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.*

Section 21002.1 of the California Public Resources Code further states:

> *In order to achieve the objectives set forth in Section 21002, the Legislature hereby finds and declares that the following policy shall apply to the use of environmental impact reports prepared pursuant to this division:*
>
> *(a) The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.*
>
> *(b) Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.*

(c) *If economic, social, or other conditions make it infeasible to mitigate one or more significant effects on the environment of a project, the project may nonetheless be carried out or approved at the discretion of a public agency if the project is otherwise permissible under applicable laws and regulations.*

(d) *In applying the policies of subdivisions (b) and (c) to individual projects, the responsibility of the lead agency shall differ from that of a responsible agency. The lead agency shall be responsible for considering the effects, both individual and collective, of all activities involved in a project. A responsible agency shall be responsible for considering only the effects of those activities involved in a project which it is required by law to carry out or approve. This subdivision applies only to decisions by a public agency to carry out or approve a project and does not otherwise affect the scope of the comments that the public agency may wish to make pursuant to Section 21104 or 21153.*

(e) *To provide more meaningful public disclosure, reduce the time and cost required to prepare an environmental impact report, and focus on potentially significant effects on the environment of a proposed project, lead agencies shall, in accordance with Section 21100, focus the discussion in the environmental impact report on those potential effects on the environment of a proposed project which the lead agency has determined are or may be significant. Lead agencies may limit discussion on other effects to a brief explanation as to why those effects are not potentially significant.*

The CDFG and Service do not believe that the DEIR prepared for the Coyote Valley Specific Plan meets the CEQA standards described above. In addition to addressing the preliminary issues raised in our January 3, 2007 letter, we strongly recommend that the following deficiencies be rectified in a revised DEIR prior to recirculation to the public:

1. Lack of understanding of CEQA and its implementing regulations (i.e. properly utilize stated thresholds of significance)
2. Failure to provide a complete project description (i.e. primary function of the "Greenbelt," BOH alignment, and water tank placement)
3. Inappropriate effects analysis for the removal of large amounts of vegetative communities
4. Failure to acknowledge impacts to several special status plant and animal species
5. Inadequate impacts analysis for many plant and wildlife species (i.e. inadequate corridor analysis, inadequate night time lighting analysis, and deferral of field data collection)
6. Failure to appropriately analyze impacts to plant and wildlife linkages
7. Omission of related projects that would have a significant cumulative impact on biological resources

The DEIR is severely deficient in scientific data, and thus many of the conclusions drawn in the DEIR are unsubstantiated or, in some cases, false. Furthermore, mitigation measures, if present, are often inappropriate since they lack project-specific detail and do not always adequately offset adverse impacts. As such we do not believe the Coyote Valley Specific Plan DEIR provides the public and the City of San Jose's elected officials with adequate information upon which to base an informed decision.

Please contact Chris Nagano, Cori Mustin, or Mike Thomas of the Service's Endangered Species Program, at (916) 414-6600 or for CDFG, Dave Johnston, Environmental Scientist, at (831) 466-0234 or Mr. Scott Wilson, Environmental Program Manager, at (707) 944-5584, if you have any questions regarding this letter.

Sincerely,

Charles Armor
Acting Regional Manager
Bay Delta Region
California Department of Fish and Game

fn Cay C. Goude
Assistant Field Supervisor
Endangered Species Program
U.S. Fish and Wildlife Service

cc:
Maura Eagan Moody, NOAA-Fisheries, Santa Rosa
Jonathan Ambrose, NOAA-Fisheries, Santa Rosa
Holly Costa, U.S. Army Corps of Engineers, San Francisco
Brian Wines, Regional Water Quality Control Board, Oakland
Luisa Valiela, Environmental Protection Agency, San Francisco
Supervisor Donald Gage, Santa Clara County, San Jose
Ken Schreiber, County of Santa Clara, San Jose
Elish Ryan, Santa Clara County Department of Parks and Recreation, Los Gatos
Pat Showalter, Santa Clara Valley Water District, San Jose
Tom Fitzwater, Valley Transportation Authority, San Jose
Gregg Polubinsky, City of Gilroy, Gilroy
Cydney Caspar, City of Gilroy, Gilroy
Kathy Molloy Previsich, City of Morgan Hill, Morgan Hill
David Zippin, Jones & Stokes, San Jose

Literature Cited

Allen, E. A. December 11, 2006. Letter to Laura Moran, WRA Environmental Consultants.

Bass, R., E., Herson, I., Bogdan, K. M. 1999. CEQA Deskbook, Solano Press, California

Beier, P. and S. Loe. 1991. Checklist for Evaluating Impacts to Wildlife Corridors. Wildlife Society Bulletin 20:434-440.

Buchanan, B. W. 2006. Observed and Potential Effects of Artificial Light on Anuran Amphibians. Pages 19-42 *in* C. Rich and T. Longcore (editors). Ecological Consequences of Artificial Night Lighting. Island Press. Washington, D.C.

_____ 1993. Effects of Enhanced Lighting on the Behavior of Nocturnal Frogs. Animal Behavior 45: 89-899.

Bulger, J. B., N. J. Scott Jr.; R. B. Seymour. 2003. Terrestrial activity and Conservation of Adult California Red-Legged Frogs *Rana Aurora draytonii* in Coastal Forests and Grasslands. Biological Conservation 110 (2003): 85-95.

California Natural Diversity Database. 2007. RAEFIND. Natural Heritage Division. California Department of Fish and Game., Sacramento, California.

_____ 2007. BIOSIS. Natural Heritage Division. California Department of Fish and Game. Sacramento, California.

CEQA Guidelines: California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387

City of San Jose. March 2007. Draft Environmental Impact Report, Coyote Valley Specific Plan.

County of Santa Clara, Santa Clara Valley Water District, City of Gilroy, City of Morgan Hill, City of San Jose, Santa Clara Valley Transportation Authority, California Department of Fish and Game, and the United States Fish and Wildlife Service. 2005. Planning Agreement by and among the County of Santa Clara, the Santa Clara Valley Water District, the City of Gilroy, the City of Morgan Hill, the City of San Jose, the Santa Clara Valley Transportation Authority, the California Department of Fish and Game, and the United States Fish and Wildlife Service regarding the Santa Clara Valley Natural Community Conservation Plan. San Jose, California

Fellers, G. 2005. *Rana draytonii* Baird and Girard, 1852b California Red-Legged frog. Pages 552-554 *in* M. Lannoo (editor). Amphibian Declines the Conservation Status of United States Species. University of California Press. Berkeley, California.

Fellers, G. M. and P.M. Kleeman. 2007. California Red-Legged Frog (Rana draytonii) Movement and Habitat Use: Implications for Conservation. Journal of Herpetology. 41(2): 271-281

Feeney, L.R. 1997. Burrowing Owl site tenacity associated with relocation efforts. Pages 132-137 *in* J.L. Lincer and K. Steenhof (editors). The Burrowing Owl, its Biology and Management: Including the Proceedings of the First International Symposium. Raptor Research Report No. 9.

Jennings, M.R. and M.P Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. California Department of Fish and Game, Sacramento, California

Jones and Stokes . 2007. Revised Draft Chapters of the HCP/NCCP. Available on: http://www.santaclaravalleyhcpnccp.org/www/site/alias__santaclaravalleyhcpnccp/351/default.aspx.

LSA Associates. 2004. Santa Rosa City Farms, Sonoma County, California. Report prepared for the City of Santa Rosa Utilities Department, Santa Rosa, California.

Polite, C. and J. Pratt. 1990. California's Wildlife: Golden Eagle. California Wildlife Habitat Relationship System, California Interagency Wildlife Task Group, California Department of Fish and Game, Sacramento, California.

Rathbun, G. B. and J. Schneider. 2001. Translocation of California Fed-Legged Frogs (*Rana aurora draytonii*). Wildlife Society Bulletin 29(4):1300-1303.

Reese, D.A and Hartwell H. W. 1997. Use of Terrestrial Habitat by Western Pond Turtles, *Clemmys Marmorata*: Implications for Management. Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles. An International Conference.

Rich, C. and T. Longcore. 2006. Ecological Consequences of Artificial Night Lighting. Island Press. Washington, D.C.

Rydell, J. 2006. Bats and Their Insect Prey at Streetlights. Pages 43-60 *in* C. Rich and T. Longcore (editors). Ecological Consequences of Artificial Night Lighting. Island Press. Washington, D.C.

Sibley, D. A. 2003. The Sibley Field Guide to Birds of Western North America. Chanticleer Press, New York, New York.

Smith, D.G. and J.R. Murphy. 1973. Breeding Ecology of Raptors in Utah. Science Bulletin, Biol. Ser. 18(3):1-76.

Sommer, S.G., and E.S. Jensen. 1991. Foliar Absorption of Atmospheric Ammonia by Ryegrass in the Field. Journal of Environmental Quality 20: 153-156.

Spencer, W. D., S. J. Barry, S. R. Beissinger, J. L. Florsheim, S. Harrison, K. A. Rose, J. J. Smith, R. R. White. 2006. Report of Independent Science Advisors for Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).

U.S. Environmental Protection Agency. February 27, 2006. Atmospheric Sciences Modeling: Community Multiscale Air Quality (CMAQ) Model. Internet Address: http://www.epa.gov/AMD/CMAQ/cmaq_model.html

U.S. Department of Agriculture. 1992. Guidelines for Evaluating Air Pollution Impacts of Class I Wilderness Areas in California. November.

U.S. Fish and Wildlife Service. 2005. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Tiger Salamander, Central Population.

_____ 2001a. Formal Endangered Species Consultation on the U.S. Highway 101 Widening, Route 85/U.S. 101 South Interchange, Riparian and Wetland Consolidated Biological Mitigation Project, Bailey Avenue Extension/U.S. 101 Interchange, and Coyote Valley Research Park Projects, San Jose and Santa Clara County, California (Corps files 25619S, 25901S, 25833S, 24877S, and 24366S).

_____ 2001b. Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)

_____ 1998. Recovery Plan for Serpentine Soil Species of the San Francisco Bay Area. U.S. Fish and Wildlife Service. Portland, Oregon. 330+ pp.

U.S. Fish and Wildlife Service and California Department of Fish and Game. 2007. Letter to Joe Horwedel, City of San Jose. Subject: Preliminary Comments on the Coyote Valley Specific Plan in the City of San Jose, California. Reference # 1-1-07-TA-0347. Letter dated January 3, 2007.

Wenger, S. 1999. A Review of the Scientific Literature on Riparian Buffer Width, Extent and Vegetation. Office of Public Service and Outreach, Institute of Ecology, University of Georgia. Available online at http://outreach.ecology.uga.edu/tools/buffers/lit_review.pdf.

Wise, S.R. and B.W. Buchanan. 2006. Influence of Artificial Illumination on the Nocturnal Behavior and Physiology of Salamanders. Pages 221-251 *in* C. Rich and T. Longcore (editors). Ecological Consequences of Artificial Night Lighting. Island Press. Washington, D.C.

Personal Communications

Allen, Edith. June 4, 2007. Electronic message to Cori Mustin, FWS. Subject: Re: Coyote Valley Specific Plan (CVSP)_Air Quality Analysis

Arnold, Richard. January 8, 2007. Electronic message to Mike Thomas, Service. Re: population information on bay checkerspot butterflies in Santa Teresa Hills area. January 8, 2007.

Austin, Rick and Janell Hillman. June 18, 2007. Electronic message to Mike Thomas, Service. RE: exotic/invasive plants in serpentine areas near streams.

Barclay, Jack. June 20, 2007. Electronic message to Cori Mustin, Service. Re: burrowing owl relocation.

Boyd, Darryl, City of San Jose; Joe Horwedel, City of San Jose, David Johnston, CDFG, Clark Morrison; City of San Jose Legal Council; Cori Mustin, Service; Chris Nagano, Service. April 19, 2007. Teleconference regarding the Coyote Valley Specific Plan.

Boyd, Darryl, City of San Jose; Holly Costa, USACE; Maura Eagan Moody, NOAA Fisheries; Keith Garner, Sheppard, Mullin, Richter & Hampton LLP; Jared Hart, City of San Jose; David Johnston, CDFG; Mike Josselyn, WRA; Clark Morrison; City of San Jose Legal Council; Cori Mustin, Service; Chris Nagano, Service; Justin Semion, WRA; Mike Thomas; Service; Robert Uram, Sheppard, Mullin, Richter & Hampton LLP; Luisa Valiela, EPA; Kerry Williams; Coyote Housing Group; Brian Wines, RWQCB. January 11, 2007. Monthly Interagency Meeting for the Coyote Valley Specific Plan.

Launer, Dr. Alan, Campus Biologist and Research Associate, Center for Conservation Biology, Stanford University

Nagano, Chris. February 7, 2007. Electronic message to Robert Uram, which was forwarded to the City of San Jose and interagency CVSP working group.

Rahmig, Troy. November 16, 2006. Electronic message to Mike Thomas. Subject: Quick question on least bell's vireo.

Tonnesen, Gail. June 7, 2007. Electronic message to Cori Mustin and Edith Allen. Subject: RE: Coyote Valley Specific Plan (CVSP) _Air Quality Analysis

Valiela, Luisa. May 3, 2007. Electronic follow-up message for the May 2, 2007 CVSP interagency meeting.

Weiss, Stuart. April 25, 2007. Coyote Ridge wildflower tour.

_____ December 29, 2006. Meeting with Chris Nagano, Mike Thomas, and Cori Mustin, Service.

Weiss, Stuart and Gail Tonnesen. December 8, 2006. Presentation of Impacts of Nitrogen Deposition on California Ecosystems and Biodiversity at the California Energy Commission, Sacramento, California